

# Antelope Valley Study The Big Picture



Sponsored by

***Antelope Valley Advisory Committee***  
***Joint Antelope Valley Authority***

City of Lincoln  
University of Nebraska–Lincoln  
Lower Platte South Natural Resources District



# The Big Picture—Antelope Valley Study

## (Twenty Year Plan & Phase 1 Projects)

Imagine a beautifully landscaped waterway flowing along the east edge of downtown, with outdoor cafes, shops and a small, weekend band playing in the new linear park. Commuter and recreational bicyclists pedal along the waterway's attractive banks as part of a new downtown/university bike trail.

Over 800 homes and 200 businesses are now safe from the Antelope Creek designated 100-year flood event. Neighborhoods in Malone, Clinton and North Bottoms experience less drive through traffic.

Two blocks away, cars travel on a new landscaped boulevard along the east edge of the downtown/university area and then

*"Lincoln can reinvest in the core of the city and grow at the edges.*

*The continuation of Lincoln's quality of life directly depends upon all its parts, including a center core area, remaining healthy, safe and vibrant,"*

*said Mayor Wesely.*

pass over the railroad tracks near the Bob Devaney Center that used to block Lincoln traffic five out of 24 hours every day. The nine miles of new roadways provide newer and faster ways to travel from the historical city center to northern and northeastern Lincoln.

The City of Lincoln, University of Nebraska-Lincoln (UNL), and the Lower Platte South Natural Resources District (LPSNRD) have engaged consultants, economists, planners, engineers and facilitators to consciously ask the community, "What do you want Lincoln, and particularly the 600 square-block historical core to look like in twenty years?" The result is the "Amended Draft Single Package." For four years, community members and representatives from the three governing entities have met in over 1,000 meetings to compose the Amended Draft Single Package.

"Many cities larger than Lincoln have failed to ask their constituents that important question," said Mayor Don Wesely. "The result in most instances has been a flight by many more affluent people to the suburban edge. With less economic reinvestment, blight and decay move into the center core with the

results being higher crime, gangs, and other big city problems. In addition, these larger city governments have had to spend valuable tax dollars on additional roads, water, sewer and other governmental services for citizens that fled to the outer edges."

Antelope Valley is all about asking the community whether Lincoln should follow the well traveled path experienced by most growing and bigger cities—a path full of blight in the core, fiscal problems and resulting despair and lack of hope for many of its citizens—or do we want to grow and keep a better balance between a healthy, safe and prosperous core and a vibrant and expanding community edge.

If the community agrees with this bold 15 to 20 year vision, the administrations of the three Antelope Valley partners are proposing the first set of strategies be built and implemented over the next six to 10 years. These first 10 strategies are referred to as the "Phase 1 Projects"—ranging from a new attractive waterway and two new major roadways to new and rehabilitated housing, commercial, recreational and neighborhood revitalization opportunities.

The Phase 1 Projects incorporate over two-thirds of the Amended Draft Single Package and come with a \$175 million dollar (1999 dollars) price tag. Major funding is expected to be shared by the Federal and State Governments, from special grants or entitlement accounts, with the balance funded by a series of fourteen other potential sources, including the three governmental partners, Burlington Northern Santa Fe Railway, Railroad Safety Transportation District, and private investors, corporations and foundations. Last year, as "place holder plans," City officials incorporated most of the City's share of the Phase 1 Project in the City's one to six year Capital Improvement Plan (CIP). Other priority City projects are also funded in the CIP. City officials do not project any significant property tax increases because of the Phase 1 Projects.

"One of the primary benefits of several governments coordinating and carrying out an interrelated set of projects over a multi-year time frame is that each Partner contributes a relatively small portion of the overall Phase 1 Project investment of funds," said UNL Chancellor James Moeser. "In return, each Partner and its constituents receives a relatively high total return in public benefits."

"If we are successful at implementing these sets of strategies," added Moeser, "it will position the University of Nebraska-Lincoln well for decades to come. We have the opportunity to free 50-acres of the downtown campus from the serious threat of flooding and improve traffic flow in and around the campus. As a result the surrounding residential and business neighborhoods will be enhanced and strengthened," added the Chancellor. "That will set the stage to continue and improve all aspects of the University and attract the next generation of fine students and faculty who want to learn, live, research and teach in a high quality and dynamic educational community."

The final Phase 1 Project funding and implementation decisions are subject to the



Design charrette of proposed performance pavilion east of waterway.

approval of the Lincoln City Council, University of Nebraska Board of Regents and the Lower Platte South Natural Resources District Board, as well as a variety of other federal, state and local agencies and entities. The most optimistic timetable for the first set of governmental approvals would be in the Fall of 2000, with possible construction beginning in 2001 and taking six to 10 years to complete.

While the time frame is aggressive and the Phase 1 Project, costs are large, the potential benefits are even greater and lead the three partnering administrations to recommend that the community go forward with the Phase 1 Projects approvals and implementation.

Approximately 1,300 homes, businesses, churches, and educational facilities are threatened in the designated 100-year floodplain of Antelope Creek. "Working together as a partnership, we can construct an attractive and affordable waterway that not only removes the serious flooding threat to lives and property but encourages private sector reinvestment, expands the tax base and generates new public recreational and trail opportunities in and around downtown and the University campus," stated Glenn Johnson, LPSNRD General Manager.

"Under the Antelope Valley Plan, the community consensus process told us that government must be more responsive, do more and yet be fiscally prudent with local tax dollars. We believe this proposed set of projects is responsive to the four-year community consensus process," said Johnson. "The community consensus process and the Antelope Valley Study have been guided by a citizen advisory committee that now numbers over 60. This broad representative advisory body of neighbors, businesses, nonprofit and governmental officials, has met 51 times for two hours over a four-year period. The community is indebted to the Advisory Committee's dedication and commitment to address and solve many, many complex and sticky issues and be able to offer a

consolidated and coordinated package that addresses storm water, transportation and community revitalization."

While various large and small community groups have met over 1,000 times during a four year period, it is not too late to get involved, ask questions and express opinions. "A potential series of projects of this magnitude raises many questions and concerns," stated the Mayor. "The three governmental Partners invite the public to review the Draft Environmental Impact Statement, visit the four scheduled open houses, tour the proposed project area, and attend and testify on the environmental impact at the August 1st and August 2nd Town Hall Meeting and Public Hearing."

"The vision is lofty and comes with a sizable cost," said the Mayor. "Still, the taxpayers' share is very reasonable considering the benefits the community will receive if we decide to go forward. In comparison, the doing nothing alternative is even more expensive and provides little benefit, as many bigger cities have unfortunately discovered."

"The continuation of Lincoln's quality of life directly depends upon all its parts, including a center core area, remaining healthy, safe and vibrant," said Mayor Wesely.

While the three partners are guardedly optimistic about project implementation, there are many important pieces that still need to come together before the proposed projects can become a "reality."

"This community has been blessed with a history of growth, while maintaining a high quality of life," said the Mayor. "We have seen time and time again that we all 'win' when this community works together in a selfless fashion and not at the expense of a particular group or geographic area. I am confident this spirit of cooperation and caring will be reflected as we go forward as a community and determine our readiness to implement the first set of Antelope Valley strategies as well as carry out other important community priorities."

### Table of Contents

The Big Picture Overview .....	2-3
Public Process/Bottoms Up Approach .....	4-5
Stormwater Improvements .....	6-7
Traffic Improvements .....	8-9
Amended Draft Single Package .....	10-11
Community Revitalization .....	12-13
Project Costs & Funding .....	14
Project Milestones & Next Steps .....	15
Kansas City Example .....	16
JAVA (Joint Antelope Valley Authority) .....	17
Draft Environmental Impact Statement .....	18-19

# Highlights of the Phase 1 Projects

On December 10, 1999, Lincoln Mayor Don Wesely, UNL Chancellor James Moeser, and Lower Platte South Natural Resources District General Manager Glenn Johnson, announced their collective effort to seek governmental approvals of the first phase of proposed projects as outlined by the Amended Draft Single Package. The first set of 10 proposed projects, known as "Phase 1 Projects," would take approximately six to 10 years to construct at a cost of approximately \$175 million in today's dollars. Funding would come from a variety of federal, state, and local sources, with no significant tax increase projected. The proposed Phase 1 Projects and benefits include:

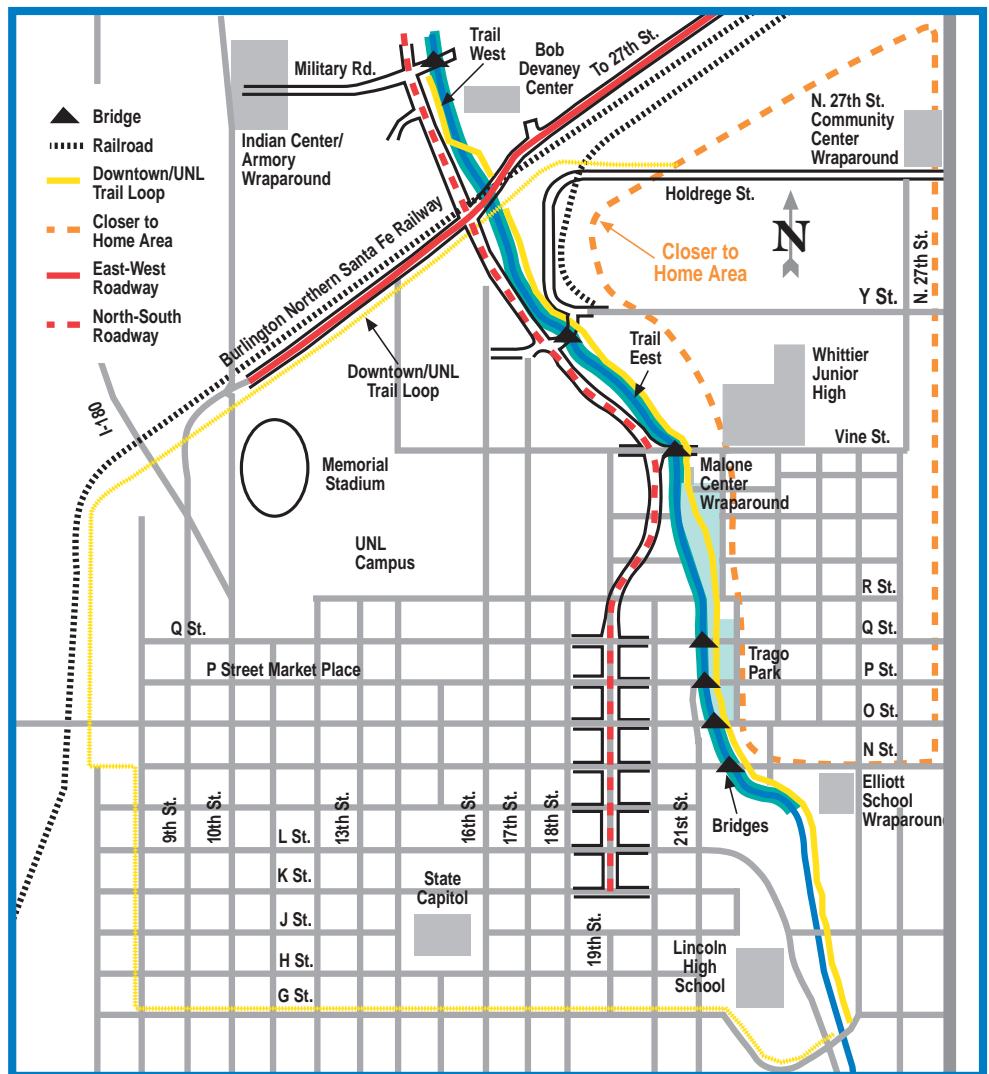
- **Construction of a landscaped Antelope Creek waterway from "J" Street to Salt Creek designed to reduce and confine the designated 100-year flood plain within the channel banks:** Antelope Creek would be restored within a one-half block wide linear park as an open waterway carrying flowing water north. The stream banks would gently rise as grassy areas and a bike trail from a point near "J" Street and Lewis Ball Fields, heading north, then turning northwest and paralleling 21st Street on the east side. The waterway would gradually turn westward one block beginning at "R" Street to the western border of Trago Park, turn due north, and continue to Vine Street where it would flow through the UNL campus and State Fair Park reconnect with Salt Creek.

- **Reduce flood damages and remove up to 1,000 structures and up to 50-acres of the UNL City Campus from the designated 100-year flood plain:** The new conveyance system would decrease water surface elevations and reduce and confine the designated 100-year flood plain within the channel banks which in turn would ease development restrictions on land currently within the designated 100-year flood plain. The South Street bridge over Antelope Creek would also be reconstructed and the S. 38th Street bridge would be removed to reduce significant conveyance constraints that currently contribute to flooding upstream of these bridges.

- **Development of a new park and recreation facilities;** **Expansion of Trago Park:** Creation of a new northeast park and recreation fields (33-acre) west of N. 33rd & Huntington Avenue and expansion of Trago Park to "O" Street.

- **Creation of a Downtown/UNL bike trail loop connecting six existing and proposed trails to provide direct access to Downtown and the UNL City Campus:** The proposed loop trail would parallel Antelope Creek east of downtown, border the UNL City Campus to the north, proceed south through the Haymarket, and turn west at "G" Street. The trail would complete its loop near Lincoln High School where it connects with Antelope Creek's existing trail.

- **New North-South roadway:** A new four lane North-South Roadway (located in a right-of-way for possible expansion to six lanes) would be provided in the 19th Street corridor from "K" Street along the east side of the UNL City Campus, curving along the east side of UNL's Beadle Center, continuing north and west to bridge over the Burlington Northern Santa Fe (BNSF) mainline railway west of the Bob Devaney Center, and connecting to 14th Street near Military Road. The North-South Roadway would include an extra wide



Reprinted with permission Lincoln Journal Star/ Kim Stolzer

landscaped median in Downtown.

- **New East-West roadway:** A new four lane East-West Roadway would extend from 10th and Avery Streets eastward, first on the south side of the BNSF mainline railway intersecting with the North-South Roadway above grade at a signaled intersection. After the North-South Roadway intersection, expanded to six lanes from four lanes, the East-West Roadway would bridge over the BNSF Railway and parallel the BNSF mainline tracks on the north side to North 27th Street.

- **Elimination of dangerous railroad/street intersections with BNSF mainline:** Grade crossings of mainline railway tracks that block sidewalks and roadways approximately five hours a day will be closed at N. 14th Street and N. 17th Street. They will be replaced by a pedestrian underpass and a new four

way road overpass bridge that is part of the new North-South Roadway and East-West Roadway.

- **Proposed downtown supermarket, potential expansion of the downtown area east of 17th Street to the new waterway:** New private sector development opportunities for a downtown supermarket near 19th and "O" Streets, an expansion of Market Place ("P" Street) connecting Lincoln's two historic train stations, and other new retailing, office and housing opportunities between 17th Street and the new waterway near 22nd Street.

- **"Closer to Home" Strategies to improve the core neighborhoods:** Improved housing opportunities and other residential and commercial revitalization strategies, are included, along with alley rocking and paving, sidewalk and street repairs, street lighting, traffic calming, tree removal and replanting, etc. With the reduction of flood damages, the threat to human life and also the reduction and confinement of the designated 100-year flood plain within the channel bank; reinvestment will increase throughout the core area. Viable homes would be acquired as part of the waterway and roadway and would be relocated to fill in vacant lots.

- **Expansion of wrap-around community centers:** Expand community, neighborhood and health services of existing facilities at locations such as 27th & Holdrege St., Elliott School, Clyde T. Malone Community Center and the Armory/Indian Center. Wrap-around centers create efficiencies by having several agencies locate and work together to provide community services at a single location.

During the last two years, a preliminary functional design has been developed for the proposed Phase 1 Projects and the environmental documentation prepared.

## Potential Phase 1 Benefits

- Reduce flood damages and the threat to human life along Antelope Creek by constructing two miles of an attractive open waterway that will remove over 800 dwelling units, 200 businesses and 50-acres of the University of Nebraska-Lincoln City Campus from the current designated 100-year flood plain.
- Lessen congestion and improved travel times by constructing 6 miles of new roadways and 11 new or replacement bridges.
- Increase neighborhood revitalization in the Downtown Neighborhood, Malone, Clinton, Hartley, Woods Park,

North Bottoms, East Campus and University Place Community Organization by increasing and improving housing stock, neighborhood support services, alleys, sidewalks and landscape.

- Strengthen downtown with a new supermarket, new foot print for large and small companies and specialized retail areas.
- Reduce inner city blighting factors.
- Encourage citizens to live, work and play in the historical city center so there are quality alternatives to the city edge, reducing the need to provide costly and duplicative public services.



# Public Consensus Process: Based Upon A “Bottom-Up” Approach

## Advisory Committee

The Antelope Valley Advisory Committee was formed in June, 1996 and has met 51 times over the four year period. Colleen Seng, Jan Gauger and Keith Parker, as Tri-Chairs, have guided the Committee's work. The Advisory Committee's initial task was to identify and define the Purposes and Needs of the Antelope Valley Study and sponsored the first Town Hall Meeting (September, 1996). Following these steps, the Advisory Committee helped develop, screen and refine options to solve the Study's Purposes and Needs. They also reviewed staff generated

and special interests. Throughout the process, the Advisory Committee also has sponsored meetings with the potentially impacted residences and business owners and tenants to give them the opportunity to be fully advised and help revise the proposed plans.

## Design Charettes

Many of the key design features of the waterway, roadway and abutting proposed land uses were developed with the community in two public design charettes lead by University of Nebraska Architecture Professor, Tom Laging. These visual concepts have



Design charette concept of proposed Antelope Creek and Trago Park art wall.

materials as draft documents and findings became available, guided the evolution and development of the Draft Single Package at the second Town Hall Meeting (November 1997) and later refined the Amended Draft Single Package.

The Advisory Committee is a unique mix of dedicated and interested neighborhood citizens, nonprofit organizations, businesses and government officials. The Advisory Committee initially consisted of approximately 20 members and has gradually increased to over 60 members as interest in the Study has grown. The three Partners are truly appreciative of the amount of time and commitment these citizens have made to help lead the planning process.

## Work Plan

### Review Committee

Even before the Advisory Committee was formed, a working committee first outlined the public involvement process for use by the three Partners. Known as the Work Plan Review Committee, this committee also developed “fair play rules” that have been used throughout the process to help provide citizen inclusiveness, fairness, and consensus decision-making.

## Workshops &

### Many, Many Meetings

At key times, the Advisory Committee sponsored workshops and formed working subcommittees on a variety of topics and issues: health and human services, trails and open space, youth recreation, and housing. The eleven key neighborhoods held special workshops to refine neighborhood issues and develop the “closer to home” strategies that are now part of the Phase 1 Projects.

Over the four-year period, over 1,000 meetings have been held to receive public input from neighborhood organizations, city wide business groups, fraternal organizations

helped shape the exciting potential of the community revitalization programs and have been incorporated into the preliminary functional design plans of the Phase 1 Projects.

## Newsletters, Video, Radio Interviews

Six newsletters have been published during the Antelope Valley Study and mailed to a general mailing list of over 3,000 citizens, including residents, property owners, businesses, and community leaders. There have been press releases at key study milestones to keep the public advised and informed. Videos have been produced and broadcast on local access cable networks to further disseminate information. Over 20 briefings with the media have been held, including radio interview and hosted call in shows.

## Governmental Review

Approximately, thirty-five special briefings have been held with elected officials. Super Commons meetings of the Mayor, City Council, County Board, and Planning Commission have been held at key study milestones. In turn, the key Study phases have been adopted and incorporated into the Comprehensive Plan by the elected officials.

Several public hearings related to the Antelope Valley Study have been conducted. These include hearings in front of the Lincoln City Council, Lancaster County Board and the Lincoln-Lancaster County Planning Commission. Most recently, these bodies held public hearings and approved an amendment to the Comprehensive Plan to include the Amended Draft Single Package.

## Upcoming Public Input Opportunities

Public input and review is not over. Preliminary plans and agreements have been outlined by the three Partners and Antelope

Valley 60-plus community member Advisory Committee on many aspects of the proposed Phase I Projects. Still, many, many more public participation steps have to be completed before the Antelope Valley vision can become a reality and construction begins.

Now that the federal government has released the Draft Environmental Impact Study and the Draft Feasibility Report and Draft Environmental Assessment, public comments and testimony are being sought until August 15, 2000 (45-day comment period). As part of the federal document review process, the Draft Environmental Impact Statement, the Assessment of Effects and Draft Feasibility Report and Draft Environmental Assessment will be linked and available on the City of Lincoln's web page ([www.ci.lincoln.ne.us/city/pworks/index.htm](http://www.ci.lincoln.ne.us/city/pworks/index.htm)). A new series of Channel 5 public access television shows will be airing in the month of July. Public open houses will be held 7-8:30 PM on July 24th 25th, 26th and 27th. On Saturday, July 29th, from 9-11 AM, the public can experience and tour the area involving the Phase 1 Projects. Guided bus tours will leave Lincoln High School north parking lot every 30 minutes.

These activities will lead to a third Town Hall meeting on August 1st and 2nd, at Lincoln High School, from 4:00 PM to 9:00 PM. This Town Hall will provide additional public information, discussions and formal public hearings to receive public comments on the Draft Environmental Impact Statement and the Draft Feasibility Report and Draft Environmental Assessment. The Advisory Committee and the Joint Antelope Valley Authority (JAVA) will sponsor the third Town Hall Meeting. The key components of the Antelope Valley Study and the Phase 1 Projects will be displayed and explained by Advisory Committee, Management Committee and Study Team members. In addition, on the same dates and time, the public can give comments and testimony in front of hearing officers regarding the Draft Environmental Impact Statement, the Assessment of Effects, and the Draft Feasibility Report and Draft Environmental Assessment.

The formal Phase 1 Project approval is expected to begin in early Fall. Project funding and implementation strategies will be subject to the approval of the Lincoln City Council, University of Nebraska Board of Regents and the Lower Platte South Natural Resources District Board, as well as a variety of other federal, state and local agencies and entities. The major governmental approvals include the following: (i) Antelope Valley reflected in Comprehensive Plan Amendment; (ii) Environmental Impact Statement (iii) U.S. Army Corps of Engineers Antelope Creek Feasibility Study; (iv) Phase 1 Projects funding and (v) approval of the Implementation Period of the JAVA Interlocal Agreement by the Partners. The optimistic timetable for the completion of this first set of governmental approvals is December, 2000.

# Purposes and Needs...

At the first Antelope Valley Town Hall Meeting in September 1996, approximately 200 interested citizens established the top eight major Purposes and Needs of the Antelope Valley Study. These eight were again discussed and reaffirmed at Town Hall 2 after the start of the National Environmental Policy Act (NEPA) process:

- 1 Neighborhood Vitality:** The health and spirit of neighborhoods depends, in part, on availability of good housing, jobs, education, shopping, transportation, personal safety, and medical services.
- 2 Stormwater Management:** A 100-year flood event (a 1% chance of occurring annually) in Antelope Creek could cause extensive property, building, contents and infrastructure damages. Local floodplain management regulations stop many development opportunities or cause additional costs.
- 3 Downtown Area Vitality:** Downtown businesses need a competitive reason not to leave the downtown area for new development areas at the City's edges.
- 4 Traffic Operations:** Continued traffic growth is expected in Lincoln, increasing traveler delays and increasing the potential for safety conflicts. In addition, missing connections in the street system and lack of alternatives cause “through” drivers to use neighborhood streets.
- 5 Land Use Patterns:** Different neighborhoods and land uses have sometimes grown in unplanned ways, potentially causing some land to be underutilized and other uses of land to be in direct conflict with one another.
- 6 Trail Continuity:** Actively used bicycle and hiking trails approach Downtown but are not connected to form a coordinated trail network.
- 7 Recreation:** Recreation facilities, parks and open space in the older city neighborhoods are in short supply for all ages, but particularly for youth.
- 8 Health and Human Services:** Good health is directly related to access to good food, housing, transportation, and a clean and healthy environment as well as to affordable and accessible health care and human service facilities.

# Neighborhood Leaders Thoughts On Antelope Valley

From the very beginning the Antelope Valley Study has been billed as Lincoln's most ambitious public works and redevelopment plan ever. Planners talk of a raised main intersection near the Devaney Center; a green, landscaped, flood-controlling waterway where there wasn't any green before, much less creek water. A parallel bike trail would bustle with hikers and bikers. The three Partners have spent the last decade studying the details, making changes, and re-studying during meeting after meeting after meeting. Now, as the Antelope Valley Study is closer to becoming a reality, a few of Lincoln's neighborhood leaders are beginning to realize that this most ambitious plan has become Lincoln's best-ever mechanism for community revitalization.

Just the prospect of uncovering Antelope Creek for a mile north of "N" Street, where it now flows through an underground conduit, and making it an urban greenway has the demand for housing exceeding the supply in adjacent neighborhoods like Malone and Clinton. Some of the demand comes from another adjacent neighborhood, the University of Nebraska. Jim Cook of the University Place Community Organization said, "There are a lot of University employees who'd like to live closer to work." He said Antelope Valley would allow the city's central neighborhoods to move away from being a buffer zone of rental property between downtown and neighborhoods where the owners occupy a higher percentage of homes.

Cook, Neighborhoods, Inc. Executive Director Terry Uland, former Malone Neighborhood Association President, Mike Morosin and Clinton neighborhood resident Delores Lintel, however, all agree the most welcome change to result from the Antelope Valley Study process, so far, is the attitude of the people who already live in those neighborhoods. "Fighting together for or against various components in the Antelope Valley Study," said Morosin, "has made the neighborhoods stronger. Most students or others who rent housing never seemed to participate in any kind of neighborhood fellowship." He

said, "Now it's common to see them in the park enjoying themselves. They feel safe."

The transformation and generally positive public attitude toward the Antelope Valley Study is even more remarkable given the fact the transformation is probably rooted in something called the Northeast Radial project. "We just woke up one morning (in the 1980s)," said Lintel, "and learned the City had been buying up land in our neighborhoods for this roadway. I thought 'How dare they?' The ensuing fracas made the recent ballpark controversy look like a seventh-inning stretch and when the dust cleared the Northeast Radial had been thrown out of the ballgame. Lintel, by all accounts, was the opposition's most valuable player.

When a map of the Northeast Radial plan is put beside a map of the Antelope Valley plan it takes several glances to notice any difference, but Lintel said the biggest difference is the Antelope Valley planners have taken, "an absolute opposite approach from the Northeast Radial." Planners have tried hard to use community input. As a result, proposed new roads in the Antelope Valley plan follow the perimeters of neighborhoods instead of bisecting them like the old plan. "Antelope Valley," according to Lintel, "encourages reinvestment and owner occupancy of housing in the neighborhoods. The process has allowed us to speak-up for stable zoning and density." Perhaps because of the foiled Northeast Radial project, planners have listened.

In its 15 years, Neighborhoods, Inc. has developed into an agency that offers second mortgages, loans to first-time homebuyers and financial rehabilitation training in six of Lincoln's older neighborhoods. Uland likes the timing of Antelope Valley. He said a lot of people see Lincoln, "as being a large small town about to become a large city," and revitalizing neighborhoods now will be a lot more economical than several years from now. Uland also likes the flood control aspects of the Study. The uncovered channel would completely contain a 100-year rainfall event, meaning no repeat of the disastrous flooding



Neighborhood leaders say the Antelope Valley Study has already made a positive impact. From the left: Jim Cook, University Place Community Organization; Delores Lintel, Clinton neighborhood resident; Terry Uland, Neighborhoods, Inc. and former Malone Neighborhood Association President Mike Morosin

of the 1950s and easier flood insurance terms. "Right now," said Uland, "when someone buys a home in those neighborhoods the mandatory purchase of flood insurance sacrifices five-to-six-thousand dollars in buying power." He sees the open channel as creating a hard line eastern boundary for the University. "I think the University will eventually divest its (main campus) assets east of the creek, allowing a more normal development of neighborhoods."

Proposed new roads in the project would be a benefit to the entire city, but there's another reason, said Cook, the city as a whole should support Antelope Valley. "Lincoln is one city. It has no suburbs and I think that's its biggest saving building block." Cook, who grew-up in Lincoln, then returned here in 1990 after a hiatus said, "reinvigoration of the core communities would bring a balance of growth between north and south," helping Lincoln to keep a sense of oneness throughout. "If we don't spend money on revitalization now, we'll lose that sense of one community." Morosin agreed, saying, "Many of the big city neighborhoods that became famous for their blight in the 1960s, such as the Watts

neighborhood in Los Angeles, are still in a similar condition today."

There is still apprehension about life along Antelope Creek for some. One of the first orders of business should Antelope Valley graduate from a study to an actual project will be the buying-out of owners whose land falls in the path of the channel. Morosin has been an active member of the Advisory Committee and a vocal critic of certain aspects of the Antelope Valley Study. He hopes to be one of the homeowners to take advantage of the Study's proposed program to have the city move viable houses in the path of the proposed waterway or roadway to other locations. "I like the character of my old house." He is anxious to find out what kind of deal the City will offer. "It's time for the City to sit down and lay the cards on the table, and, hopefully, the result will allow people to finally relax." The Antelope Valley Project would bring closure to an unsettled period for core neighborhoods. There's even a plan to have University students re-design porches for many neighborhood houses. Porches and neighborhood relaxation, a true partnership worth building.

## Historic Value of Antelope Valley

*by Ed Zimmer, Historic Preservation Planner, Lincoln Planning Department*

To a Lincoln historian, the Antelope Valley Study area offers rich and varied treasures, and subtle lessons. Let's take a "talking tour," and look for both.

On 19th century views of Lincoln, the Antelope Creek valley was the east boundary of the urban area. Some of the earliest buildings surviving in the valley reflect urban forms on the "west bank," and suburban houses east of the creek. For example, the pair of Victorian cottages at 2005 and 2011 "L" Street, built around 1890, are small, close-spaced "city" houses. The Murphy-Sheldon House at 2525 "N" Street, Royer-Williams House at 407 N. 27th Street, and Eddy-Taylor House at 435 N. 25th Street are larger houses on larger lots—more "suburban," if one imagines their original settings.

The study area includes a number of historic churches, and they in turn tell stories of early and modern Lincoln. Tifereth Israel Synagogue at 18th and "M" was built in 1912 to house one of Lincoln's two Jewish congregations. Later the compact Neo-classical building was the Community Playhouse

and then a factory for church organs. Now the adaptable building is home to 11 apartments. At 26th and "P" Streets the former Second Presbyterian Church of 1902 reflects Lincoln's evolving demographics, as the church of Lincoln's Vietnamese Catholics. The handsome church was designed by the Lincoln architects A. W. Woods and Artemas Roberts, who designed William Jennings Bryan's Fairview mansion that same year. The old Vine Congregational Church of 1908 at 25th and "S" Streets was later home to a Mennonite congregation, and since 1970 has sheltered Christ Temple Mission, a multi-racial congregation founded by Rev. Trago McWilliams.

The McWilliams family is emblematic of the lessons Lincoln can learn through the Antelope Valley Study. Now in its seventh generation in Lincoln, this strong African-American family has given our city teachers and churchmen, civil rights leaders and entrepreneurs, since the 1880s. Trago Park at the heart of the Antelope Valley projects bears the name of Trago T. and Trago O. McWilliams, father and son ministers.

Through much of the 20th century, Lincoln's African American citizens were increasingly segregated into the neighborhood now called "Malone," and a vibrant urban village grew up there, materially poor but rich in mutual support. This chapter of Lincoln's history is uniquely chronicled by the work of Earl McWilliams, a gifted photographer who recorded the city's buildings, workers, and black community between about 1910 and 1925. Several hundred of his artistic photographs survive, and present-day members of the McWilliams family are working with the Nebraska State Historical Society, the Lincoln Planning Department, and Antelope Valley Study Team to develop appropriate projects to share these beautiful and evocative images and the history they represent with Lincoln and the nation.

The historic treasures of the Antelope Valley range from sturdy buildings to fragile glass negatives. All of them can help us understand where our community began, and can enrich our future if we listen to their lessons.



# Corps of Engineers Draft Feasibility Report Concludes the Antelope Creek Flood Control Project is Economically Feasible

The Army Corps of Engineers recently released the Antelope Creek Draft Feasibility Report and Draft Environmental Assessment that concluded a proposed flood control project is economically feasible. The flood control project recommended for cost sharing provides maximum annual economic benefits in excess of annual costs with annual net benefits of \$4,535,000 and a benefit-cost ratio of 1.23.

The important finding that benefits exceed costs means the \$53 million new Antelope Valley waterway is eligible to be cost shared with the Federal Government. Approximately \$25 million of Federal funding would be provided. It is anticipated that State, City and LPSNRD funds will be used for the remaining \$28 million of costs. Completion and approval of the Corps of Engineers Final Feasibility Report and the Chief of Engineer's Report, and Congressional authorization of the flood control project in the Water Resources Development Act of 2000 are expected by the end of the year.

The Feasibility Study determined the estimated annual flood damage is \$5.3 million assuming no flood control project is constructed. This figure considered damages generated by infrequent, but catastrophic floods as well as those due to more frequent floods of much smaller magnitude. The severity of flood damage and the likelihood of flooding on an annual basis were both taken into consideration to determine the estimated annual damage.

One of the less frequent levels of flooding considered, which is important because of its effect on land use regulations, is the 100-year flood. This is the flood caused by a storm so severe that it has only a one percent statistical chance of occurring annually. More severe floods are considered in the flood damage analysis, but this one is important because it is the basis of the flood hazard area outline used for land use regulation. The City has stringent requirements controlling and limiting new construction and redevelopment of existing structures in the 100-year flood hazard area. These regulations are designed to minimize flood damage to future construction, but do nothing to prevent damage to existing buildings and contents.

The proposed Antelope Creek flood control project from the mouth to "J" Street will reduce approximately 80 percent of the estimated annual flood damage and will reduce and confine the 100-year flood plain within the channel banks. Unfortunately, no one can control the timing or amount of rainfall. Consequently, there is also a statistical chance a 100-year storm can occur twice in one year, or twice in five years or twice in 500 years. The question is not if a 100-year storm will happen but when. No one knows and the only real protection is for a community to implement proper floodplain management controls.

Antelope Creek is a small stream that starts near 91st and Pine Lake Road, flows through Holmes Lake, meanders in an open channel underneath many street bridges and through many residential and business neighborhood areas until it is forced underground into an enclosed conduit near 23rd & "N" Street, just west of Elliott Elementary School. It then disappears from sight and goes underneath several buildings, including Office Max, until it leaves the enclosed conduit southwest of Cushman near 21st and Vine Streets. The final creek leg meanders in an open channel again underneath many street bridges, through the eastern edge of the UNL campus, then underneath the Burlington Northern Santa Fe Railway tracks, and finally travels between North 14th Street and the west edge of State Fair Park, where it empties into Salt Creek south of Cornhusker Highway.

Because of increased run-off caused by urban development in the lower reaches of the Antelope Creek basin between Holmes Lake Dam and the conduit, only a four-year or smaller storm is calculated by the engineers to fit into the conduit and any larger storm would exceed the conduit and cause the excess water to travel overland, flooding many East Downtown, University, Malone, Clinton and North Bottoms neighborhood streets and properties.

The open stretches of Antelope Creek also have wide flood plains that deter redevelopment opportunities. Various street bridges crossing the open creek are too small. Lack of adequate water openings underneath the bridges cause the bridges to act as small dams, flooding properties. The small conduit and inadequate bridges cause the Federal Emergency Management Administration (FEMA) designated 100-year floodplain to reach from four to seven blocks wide in many stretches. Besides the great width of the flooding path in a 100-year flood, some Antelope Valley areas would be underneath up to six feet of water at the height of the flood.

Without Holmes Lake Dam, the downstream flooding potential would



Entrance to Antelope Creek at 23rd and "N" street. The entrance consists of two box culverts each eight feet high by nine feet wide. The gentleman standing in the opening is six feet tall.

be much greater. Holmes Lake Dam has been able to capture and hold flood water at the upper end of the watershed but cannot capture rainwater falling in the seven square miles of the Antelope Creek basin lying below the Holmes Lake Dam. Since the completion of the Holmes Lake Dam in 1962, this downstream section has added new dwelling units, businesses, parking lots and streets, which have increased the storm run-off and potential downstream flooding in the historical core area.

The small conduit, small bridge openings and extensive development have all combined to cause approximately 600 acres, 1,300 structures and 1,800 residents to be at risk of flooding and included within the currently designated 100-year flood plain. Based on the hydrologic and hydraulic analysis prepared by the Corps of Engineers, it was determined that widespread damage from flooding is likely to start with the occurrence of an event with an annual probability of 0.125 (eight-year event). In addition to millions of dollars in flood damage to property, buildings, contents and infrastructure, there is also the potential for injuries and deaths. In 1908, ten lives were lost when a big storm hit the Antelope Valley basin.

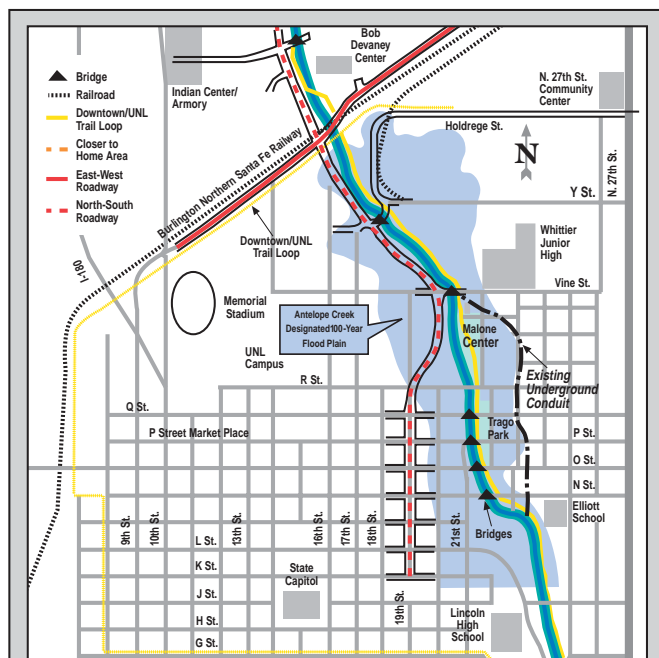
For four years the community and the Army Corps of Engineers has been trying to solve the serious risk and looking for the best set of flood plain management solutions. Many stormwater alternatives were identified, priced, measured and screened in light of other proposed transportation networks, abutting land uses, and redevelopment potentials. Some of the other alternatives explored included:

- Build another dam like Holmes Lake Dam somewhere in the watershed;
- Install up to seven large underground conduits;
- Construct three or four very large detention ponds to store water in the vicinity of 27th & Randolph Streets and Antelope Creek, and Antelope Park area;
- Lower existing streets and the proposed North-South Roadway to carry storm water through the area;
- Build a large overflow detention area on part of the Lincoln High campus and the Lewis Ballpark and relocate Capital Parkway on the south and west sides of Lincoln High School.

These and other alternatives were eliminated because they were too costly, too disruptive to neighborhoods and/or did not adequately protect the impacted areas from a 100-year flood.

The recommended Antelope Valley stormwater solution proposes keeping the underground conduit in place and building a two-mile, grassy, gently sloped open waterway at the low point

(continued on page 7)



Consultants say a proposed flood-control project along Antelope Creek would reduce and contain the designated 100-year flood plain within the channel banks. This would ease economic development restrictions and would reduce flood damage that could cost millions of dollars to property, buildings and contents. An open channel at the western edge of the Malone Neighborhood would carry most of the floodwaters.

## Past Flooding Events

During the 1900s, several major Antelope Creek floods caused considerable damage to the City of Lincoln. The source of this flooding is the inability of Antelope Creek to hold flood waters during heavy rains. Antelope Creek is a tributary of Salt Creek (which originates in Cheney) and flows northwest through the City and into Salt Creek near north 14th Street and Military Road.

Prior to 1908, there was virtually no concern for flood control. However, as the City grew and houses and businesses took the place of farm fields and prairies, the banks of Antelope Creek were unable to hold heavy rains. In July of 1908, nearly six inches of rain fell in Lincoln leaving hundreds of people homeless, killing at least ten people and causing considerable damage to property, crops and roads. Following this flood, City officials began building a 4,065 foot box underground culvert, officially known as the Antelope Creek Box Conduit to replace the open waterway. This conduit took 5 years to complete and in turn, the existing creek was filled in and citizens responded by building homes and businesses in close proximity. The conduit is still there today with water flowing under businesses, streets and homes from 23rd and "N" Streets to 19th and Vine.

On June 14, 1951, eight inches of rain fell in merely four hours which clogged the mouth of the culvert and sent water spilling over the banks. No lives were lost in this flood, but property damage was estimated at \$475,000, houses were washed away, basements filled and streets were impassable for hours.

Additional floods prompted President Dwight D. Eisenhower in 1957 to sign a bill authorizing the construction of a dam at 56th and Van Dorn. Since the completion of the Holmes Lake Dam in 1962, no 100-year floods have occurred; however, some local flooding such as in July, 1967, resulted from several heavy rains. On September 8, 1989 Holmes Lake reached a record high elevation when a storm dumped eight inches of rain in the Antelope Creek basin. Engineers estimated that damage could have exceeded \$15 million without



A different mode of travel was needed to get around at 21st and "K" Street on July 26, 1967. Heavy rain was the single cause of the flooding. Lincoln Journal Star

the dam. Though the Holmes Lake Dam, which is on the upper end of Antelope Creek, has done a good job of preventing floods, it is just a matter of time before a 100-year flood poses a substantial risk to downstream property owners where the dam provides no protection.

Since the construction of Holmes Lake, additional in-fill urban development has taken place in the Antelope Creek basin between Salt Creek and the Holmes Lake Dam, which has increased storm run-off and potential downstream flooding.

In 1993, the conduit was showing considerable wear and tear as a result of time, water and salt, so voters approved a \$4 million bond issue in 1993 to repair the 1908 conduit. The Lower Platte South Natural Resources District and City of

Lincoln jointly worked together on the repair of the conduit to strengthen and extend its life. However, these repairs, including a new liner, reduced the capacity by approximately 16 percent. Engineers now estimate that the Antelope Creek Conduit can only carry up to a four year storm and any larger storm will have to go over land, flooding parts of Downtown, the University, Woods Park, Malone and Clinton neighborhoods and UNL since there is no available open waterway.

According to the Corps of Engineers, a 100-year rainfall currently would result in floodwaters three to six-feet deep along the conduit entrance to exit and would extend approximately five blocks across and would cause millions of dollars in flood damages.

### Army Corps (continued from page 6)

of the Antelope Creek valley. This solution is the preference of the citizen Advisory Committee and was confirmed at the community Town Hall 2 Meeting in November, 1997. In turn, the three Partners incorporated the recommendation into the Amended Draft Single Package, which was reviewed positively by the Planning Commission, County Board and City Council in 1998. This is also the stormwater recommendation the Army Corps Feasibility Study found had merit by concluding that benefits exceed costs (which allows the recommendation to be eligible for federal cost sharing.)

### The Phase 1 Projects incorporate the entire Antelope Valley stormwater recommendation and includes the following components:

- **Landscaped Antelope Creek waterway to carry 100-year flood waters:** Antelope Creek would be restored within a one-half block wide linear park as an open waterway carrying flowing water north. The stream banks would gently rise as grassy areas and a bike trail from a point near "J" Street and Lewis Ball Fields, heading north, then turning northwest and paralleling 21st Street on the east side. The waterway would gradually turn westward one block beginning at "R" Street to the western border of Trago Park, turn due north, and con-

tinue to Vine Street, to the University and State Fair Park then into Salt Creek.

#### • Encourage Reinvestment

**Opportunities:** The new open linear park waterway will be aesthetically designed and attractive to encourage nearby recreational, housing and business redevelopment opportunities. Narrowing of the four to seven block wide floodplain will increase the market value of existing businesses and homes, which will encourage more renovations and maintenance and in turn help abate blighting conditions.

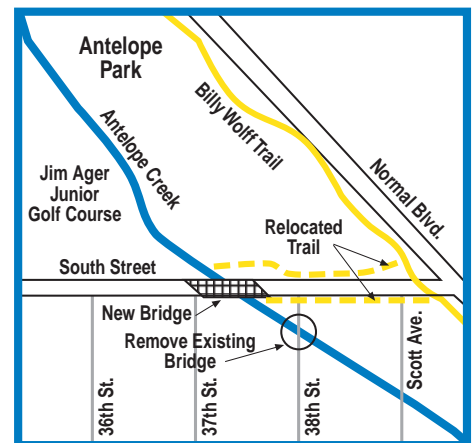
- **Reduction of the designated 100-year flood potential:** A total of over 1,100 structures and 50 acres of the UNL City Campus would no longer be threatened by the possibility of severe Antelope Creek 100-year flooding. The new conveyance system would fully accommodate a 100-year storm within its banks, which in turn would ease development restrictions on land currently within the four to seven block wide designated 100-year floodplain. The South Street bridge over Antelope Creek would also be reconstructed and the Antelope Creek bridge at S. 38th Street would be removed to provide additional flood plain protection.

- **Maintenance:** The use of the existing conduit and the proposed open waterway design will minimize clean up costs after a heavy storm. By combining resources and using special purpose districts, the City and Lower Platte South Natural Resources District believe maintenance costs will not overburden taxpayers.

## 38th Street Bridge and South Street Bridge

The most upstream elements of the Antelope Valley storm water improvements would eliminate existing bridge restrictions at 38th Street and at South Street. During intense storms the bridges back up water in Antelope Creek, causing flooding to abutting homes in the South Street and Normal Blvd. vicinity.

Removal of these two bridge restrictions would allow the water to continue down the creek corridor in an unimpeded course. In turn, about 325 structures, including 300 homes within the Normal Boulevard and South Street area would be free of the designated 100-year floodplain.



### To relieve the existing flood hazard, the Phase 1 Projects propose to:

- Reconstruct and lengthen the South Street bridge over Antelope Creek just south of the Jim Ager Memorial Junior Golf Course.
- Remove the 38th Street bridge and dead-end 38th Street on both sides of Antelope Creek. Constructing a new 38th Street bridge did not appear cost effective given the cost of the bridge, traffic volume on the street and the existence of four alternative access routes within a two block area.



# Traffic, Traffic, Traffic— Where Have We Been And Where Are We Going?

The effort to solve transportation issues in the historic center of the community has been a long, bumpy and sometimes disrupted trip. The three Partners are hopeful the Antelope Valley transportation routes will now make the trip more enjoyable and faster.

## A Brief Traffic History

For decades the University of Nebraska-Lincoln has tried to solve the pedestrian and auto situation at 16th and 17th Streets on the Lincoln campus but there has been no solution. Also, the community sought to solve the traffic flow problems from northeast Lincoln and downtown, by designing and

unsolved. Citizen participation in the Antelope Valley study reached the consensus that acceptable transportation solutions to the puzzle can no longer include routes that materially harm the core neighborhoods. In fact, public input during the Study set a course that required the new Antelope Valley routes be on the edge of residential neighborhoods and include community revitalization programs to help strengthen the historic core neighborhoods, downtown and the university campus. This difficult assignment has meant that the new roadway cannot be built with the sole motivation of moving cars. The benefits of neighborhoods must be a key component of planning the new roadway.

Diverting arterial traffic from the middle of the UNL campus to the eastern edge is another Study objective. A traffic study found over one-half of the 30,000 motorists that travel through the campus on 16th and 17th Streets per day are not University affiliated, but merely passing through on their way to north and northeast Lincoln. Anybody that has traveled these streets through the campus knows this excess traffic combined with the more than 3,000 students walking across 16th and 17th Streets to go to their classes, residence halls, Greek houses and commuter lots, is a serious safety issue. The new boulevard combined with new University parking garages next to the new roadway would combine to reduce 16th and 17th Street traffic north of "R" Street from 30,000 motor vehicles per day down to just 7,000.

## A New East-West Roadway

In addition to the North-South Roadway, a new four lane East-West Roadway would start at 9th and 10th Streets near the south approach of the 10th Street overpass and the north side of Memorial Stadium. The new roadway would extend eastward immediately north of Avery Avenue, first on the south side of the BNSF mainline tracks intersecting with the North-South Roadway on an overpass structure at a signaled intersection near the BNSF mainline railway.

After the North-South Roadway intersection, the six lane East-West Roadway would bridge over the BNSF Railway and parallel the BNSF mainline tracks on the north side replacing the diagonal road on the south side of State Fair Park and then underneath the North 27th Street overpass where a connection would be made to North 27th Street and Cornhusker Highway. This stretch of the East-West Roadway is included in the Phase 1 Projects, and when completed, will allow the City to close the North 14th and North 17th Streets at-grade rail crossings.

In a subsequent phase, the East-West Roadway splits and one branch goes primarily north crossing Cornhusker Highway and following Dead Man's Run waterway on the east side where it will meet another new roadway the City is building this year at North 33rd and Superior Streets. The City's road project this year extends North 33rd Street north near the proposed North High School site and curves the roadway back to North 27th Street at Fletcher Avenue.

The other branch of the East-West Roadway will go underneath the BNSF mainline tracks near 29th Street. The underpass will then further branch and one stretch will connect with the four-lane Huntington/Leighton Avenue at North 33rd Street. Another branch will parallel the BNSF mainline tracks on the south side and connect into Adams

(continued on page 9)



Waiting for trains to pass is a daily occurrence for pedestrians and cars.

acquiring over 300 properties for the controversial road project, known as the Northeast Radial. In 1981, voters put the brakes on the Northeast Radial Project. The community had to back up as part of the Northeast Radial Reuse Project and dispose of the acquired right-of-way and repair the resulting scars through some of Lincoln's oldest and historic neighborhoods.

Meanwhile, the Comprehensive Plan was amended in 1997. The Plan adds two major employment centers and several commercial shopping areas along North 27th Street, north of Cornhusker Highway. Travel time on North 27th Street is already unacceptable for most motorists and yet these new proposed land uses continue to add to the 27th Street congestion problem.

Lincoln continues to grow and another major employment center and more shopping centers are designated in the Comprehensive Plan, along North 84th Street between Holdrege Street and Havelock Avenue. More traffic is trying to travel through Northeast Lincoln and trying to cross the Burlington Northern Santa Fe tracks.

When the Antelope Valley Study started in 1996, were an average of 50 coal and freight trains per day that diagonally cut across Lincoln, blocking cars and trucks up to four hours in a 24 hour period. Four years later, railroad officials report there are 70 trains blocking traffic up to five hours a day. Railroad projections indicate that the train traffic will continue to grow. Police, ambulance and fire officials are increasingly frustrated and have to take slower alternative routes. Other citizens are now late for work, school, appointments and athletic events at the Bob Devaney Center.

## Traffic—Difficult Puzzle To Solve

The Antelope Valley Study has been trying to solve a multitude of traffic dilemma issues that to date remained

Over a hundred potential traffic solutions were analyzed and discussed by the community over the last four years. Eventually, the best of these plans was consolidated into the Antelope Valley Draft Single Package. Further refinements were made and the revised plan became known as the Amended Draft Single Package.

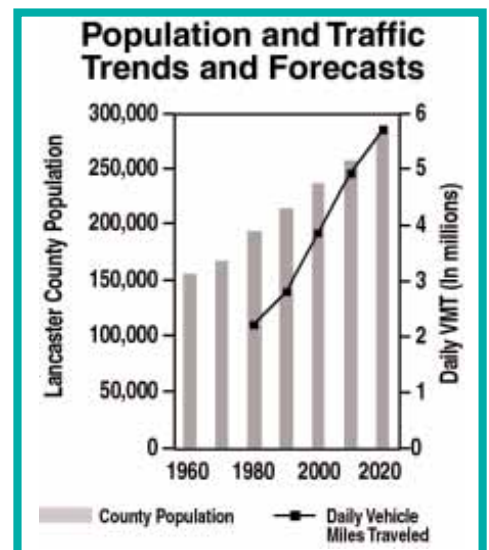
## A New North-South Roadway

In Phase 1, the new four lane North-South Roadway would start at "K" and "L" Streets and be routed along the 19th Street corridor on the east side of the UNL City Campus, curving along the east side of UNL's Beadle Center, continuing northwest to bridge over the Burlington Northern Santa Fe (BNSF) mainline railway west of the Bob Devaney Center, and connecting to 14th Street near Military Road.

The North-South Roadway would be well landscaped and in parts of Downtown initially include a 70-foot wide planted median to create an attractive boulevard effect. This roadway would be built as a four-lane divided road with the potential of widening to six lanes if traffic growth so demands. If two additional through lanes were ever needed, the landscaped median would be reduced to a 46-foot wide landscaped median.

The design of the North-South Roadway would aid in the potential creation of super sized blocks, or big land pieces in east downtown that could attract a new supermarket or office buildings in a campus setting.

Another piece of the broader picture is the creation of an eastern border for the University of Nebraska-Lincoln. The boulevard travels through the University's land where it threads between the Beadle Center and the Malone Center. This forms a solid eastern border for the University, which has often expanded upon the Malone neighborhood in the past.



Source: 1994 Lincoln-Lancaster County Comprehensive Plan



# Questions Regarding the Northeast Radial and Antelope Valley

People often mention the failed Northeast Radial—what is that?

The concept of the Northeast Radial began in 1952 as a roadway that would connect downtown/central Lincoln with developing suburbs to the north and east. Capital Parkway had just recently been constructed to serve southeast Lincoln and many business leaders and elected officials felt a similar roadway was needed for northeast Lincoln. From 1968 through 1974, the City acquired 287 properties, displacing many families and businesses, in an effort to acquire the necessary road right of ways in advance of the proposed road construction.

Oil prices rose and federal road funds diminished. Time passed and the road was not constructed. Many of the acquired properties were deteriorating causing the abutting neighborhoods to decline. Sentiment began to change. In 1980, the City Council voted 5-2 to kill the Northeast Radial. Road supporters decided to put it on the 1981 ballot. The resulting campaign further divided the community. The ballot results showed 17,524 against the Northeast Radial and 11,644 in support. The road project was defeated and dropped.

What did the City do with the 287 acquired properties totaling approximately 83 acres?

Some homes were initially demolished and turned into vacant lots neighbors thought were poorly maintained. Other homes deteriorated and after the Radial's defeat were demolished to facilitate land assembly. The City and local neighborhoods developed the Radial Reuse Project, which identified the most viable vacant lands that could be resold to families and homebuilders to construct new homes. The balance of the vacant lands became a bike trail, various pocket parks and used for other public purposes.

Aren't the Antelope Valley proposed road solutions the same as for the Northeast Radial?

Yes and no. The need to provide better traffic circulation between downtown, the university campus and north and northeast Lincoln did not go away when the voters turned down the Northeast Radial. In fact, traffic city-wide has dramatically increased,

there has been significant development in both north and northeast Lincoln during the last 20 years, and traffic congestion in these areas has worsened. Portions of the two Antelope Valley roadways have similarities with the Northeast Radial.

Both concepts start near the end of Interstate 180 at 9th and 10th Streets and parallel the Burlington Northern Santa Fe tracks.

Both concepts have components that utilize the 19th Street corridor.

And both concepts have routes that serve northeast Lincoln.

While both share similar start and destination points, the Northeast Radial route cut right through and divided residential neighborhoods. The Antelope Valley roadways are generally located on commercial streets, University lands, and State Fair properties, which collectively skirt around residential neighborhoods.

While it is difficult to compare roadway plans and costs in a simple manner, the Northeast Diagonal plans with an elevated crossing of the railroad by the Devaney Center was estimated to cost about \$19 million in 1980, and that would be about \$50 million in 1999 dollars because of escalation in construction costs. A slightly similar part of the Antelope Valley roadway plan would cost \$40 to \$50 million in today's dollars.

Compared to the Northeast Radial, what are the 'extra' traffic benefits that Antelope Valley provides?

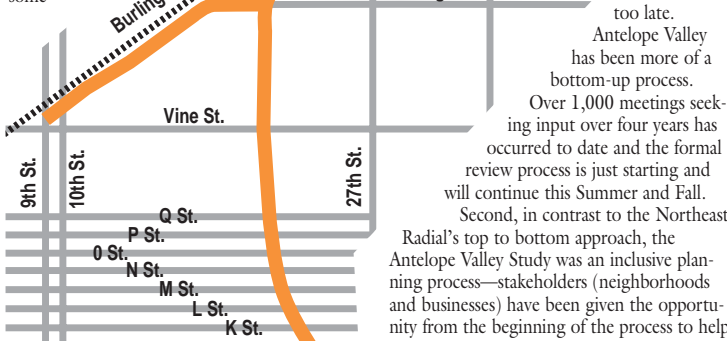
Antelope Valley starts at "K" and "L" Streets and completes a loop around downtown and the University campus. Cars will be able to circulate on the edge of downtown, thus avoiding the travel time going through the downtown area. This will provide more road capacity for those cars wanting to use the downtown streets.

Antelope Valley provides Northwest Lincoln better connections by tying into Cornhusker Highway at North 14th Street. Antelope Valley has a road link that helps create North 33rd Street north of Cornhusker Highway. This will help accommodate the large existing and proposed developments in North Lincoln along North 27th between Cornhusker Highway and Interstate 80.

Otherwise, North 27th Street would be further congested in the future.

Antelope Valley roadways provide overpasses and underpasses to allow traffic not to be blocked by trains traveling the Burlington Northern Santa Fe rail lines.

Today, some



70 coal trains a day block traffic over five hours in a 24 hour period. The Phase 1 Projects would eliminate two at-grade rail crossings (N. 14th and N. 17th Streets) and the next phase of the Amended Draft Single Package would eliminate two more at-grade rail crossings (N. 33rd and Adams Street).

What assurances does the community have that Antelope Valley roadways will not cause a big community fight like the Northeast Radial?

With a proposal the size and scope of Antelope Valley, it is expected there will be debate and some disagreement. The three Partners have spent a great deal of time and money not to repeat the mishaps associated with the Northeast Radial project. First, the two concepts' planning processes, public input and review and purposes are substantially different. To the community activists involved in both processes, the Northeast Radial road project was an attempt by a handful of business leaders and officials to impose a top-down solution. The Northeast Radial did not actively seek the public's input until it was

too late.

Antelope Valley has been more of a bottom-up process.

Over 1,000 meetings seeking input over four years has occurred to date and the formal review process is just starting and will continue this Summer and Fall.

Second, in contrast to the Northeast

Radial's top to bottom approach, the Antelope Valley Study was an inclusive planning process—stakeholders (neighborhoods and businesses) have been given the opportunity from the beginning of the process to help design the study's procedural processes as well as actively review alternatives in public forums, before it is declared a "project" and approved for construction.

Third, the Antelope Valley Study is far more comprehensive in terms of the issues and needs that were addressed, the geographic areas studied, and how the Study was approached. The Northeast Radial was a single purpose "road project" many thought would seriously harm neighborhood vitality. On the other hand, Antelope Valley has looked at the bigger picture and identified storm water management, transportation improvements and community revitalization issues that work in concert to strengthen the historical core. Many critics thought the Northeast Radial proposed route and process seriously harmed abutting neighborhoods. The Phase 1 Projects are designed around the belief that the attractive waterway, landscaped roadway and proposed community revitalization strategies will improve the historic core. These reinvestment opportunities will provide a viable alternative to the "flight" from the core to the suburban edge that most bigger cities have experienced.

## Traffic (continued from page 8)

Street near 35th Street, allowing the dangerous at-grade railroad crossing at Adams and 35th Streets to be closed. The North 33rd Street at-grade railroad crossing would also be closed after the City constructs a new North 33rd Street underpass.

The North-South and East-West Roadways allow for the completion of a downtown bypass. Already forming the bottom edge of this bypass system are the one-way pairs of "L" and "K" Streets (Capitol Parkway). Ninth and 10th Streets form the western edge. The new North-South boulevard would complete the eastern side and the East-West Roadway finishes the northern side of a downtown bypass loop. The new loop would permit through motorists to move better, while allowing motorists with business downtown to have more road capacity on the central downtown streets.

Approximately 46,000 cars now cross the BNSF rail lines

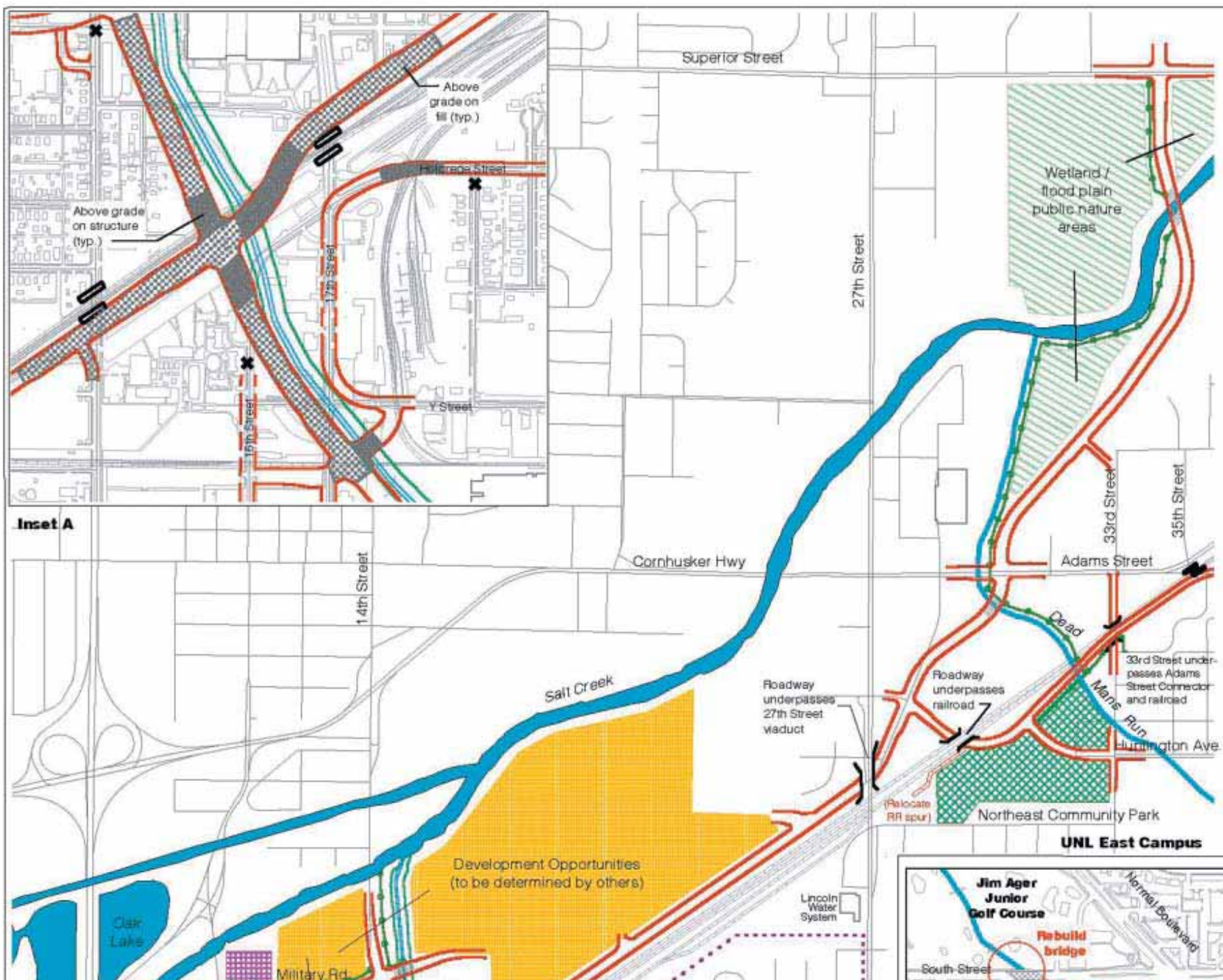
each day at 14th, 17th, 33rd and Adams Streets, sometimes having to wait extended periods for passing trains. This number has the potential to increase to 78,000. In addition, rail traffic is expected to continue to grow, causing greater delays and congestion. Building a road viaduct over the BNSF rail south of the Bob Devaney Center is the biggest Antelope Valley roadway component. The structure would carry approximately 40,000 cars north to south and 45,000 cars east to west each day. This viaduct along with the two proposed underpasses in Northeast Lincoln, would allow four dangerous at-grade crossings (14th, 17th, 33rd, and Adams Streets) to be closed. No longer would the tracks block these streets 5 hours per day out of 24 hours. In turn, average travel times and emergency responses would improve.

The new trails along the waterway, near the Devaney Center and sidewalks at the two Northeast Lincoln underpasses will provide safe alternatives to students and other pedestrians racing to beat the descending arms at the railroad crossings or

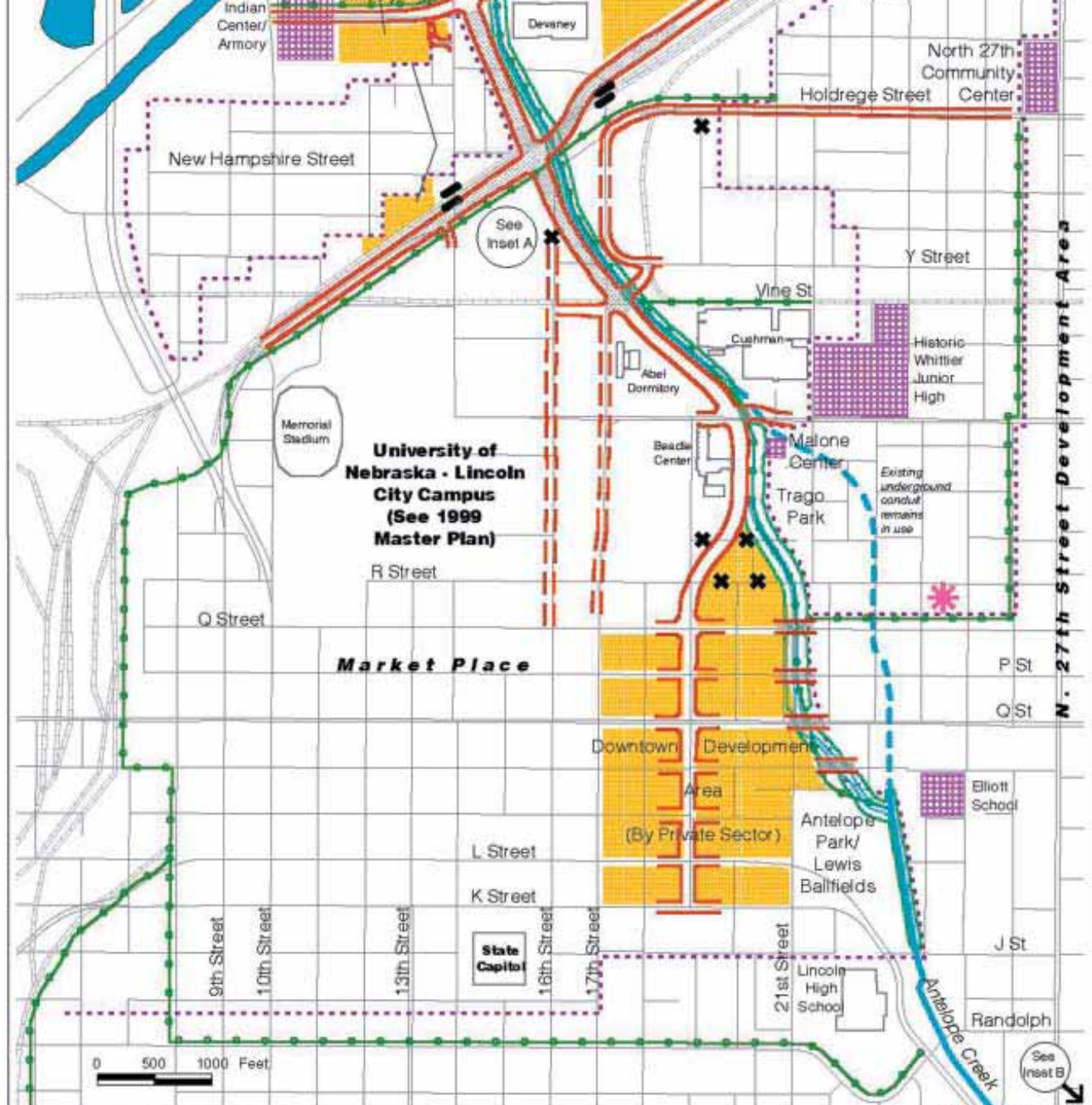
worse yet, attempting to crawl between parked rail cars on their way to activities.

Today, Holdrege Street is the main link between UNL's city and east campuses. Consequently, approximately 16,000 cars per day use Holdrege Street. With the completion of the Antelope Valley transportation package, traffic on Holdrege Street would be significantly reduced to 5,000 cars per day. The travel distance between the two university campuses will be slightly greater via the new East-West Roadway, but it will be safer, with fewer intersections and trip time is expected to be the same.

Computer models show the new roadways reducing North 27th Street traffic by 5,000 trips per day. However, the new planned growth to the north and to the northeast will continue to add traffic to North 27th Street. Still, North 27th Street is often used by traffic to make northeast to southeast movement across town. With the addition of the Antelope Valley roadways, better traffic flow on these streets.







Inset B

# LEGEND

- New roadways
- Roadway Conversion
- Open channel / park / trail
- Possible wetland mitigation areas
- Park expansion / UNL recreation
- Wrap around sites
- Development opportunities
- New bike / hike trails
- Neighborhood land use bridges
- Closed RR crossings
- Closed or limited access local streets
- Health clinic (location TBD)
- Relocated housing (location TBD)

Not shown: City "Closer to Home" Focus Area investments; relocated UNL service buildings, student recreation fields, and surface parking (sites to be determined); local street intersections.

Note: All package elements are subject to further design development and compliance with state and federal regulations

## Amended Draft Single Package



ANTELOPE VALLEY STUDY  
City of Lincoln, Nebraska  
University of Nebraska - Lincoln  
Lower Platte South Natural Resources District

# Addressing Neighborhood Vitality and

In many cities larger than Lincoln, the flight of middle and upper class citizens can be partly attributed to the lack of support services in the core neighborhoods. Citizens not only want safe core neighborhoods with good housing units, but also want close proximity to nearby churches, parks, recreation, grocery stores, medical services, retailing and community services. Given people's busy lives, minimizing travel time and conflicts becomes important considerations for people choosing where to live. In larger cities, newer areas provide not only newer housing opportunities but also more opportunities for these other neighborhood support activities.

Lincoln is starting to see a similar trend. Lincoln's historic core neighborhoods have witnessed the departure of many churches, grocery stores, medical services and jobs. The only new retailing opportunities in some neighborhoods are new gas convenience stores, pawn shops and fast check cashing facilities. Older neighborhoods in Lincoln are struggling with stagnation or the disappearance of key neighborhood support services, which makes it difficult for inner city neighborhoods to attract new families and individuals and retain existing residents.

As a general rule, Lincoln's central neighborhood residents do not want their neighborhoods to mimic newer edge areas. Rather, the historic neighborhoods want to maintain and build from their fine attributes, including downtown, higher education, entertainment, diverse cultures, historic places, architectural style and large tree canopies.

Trying to maximize the historic core's strength while addressing its weaknesses has been a major theme of the community revitalization efforts during the Antelope Valley process. In fact, "Neighborhood Vitality" received the highest community priority of the eight Antelope Valley Purposes and Needs. In turn, the three Partners and the Advisory Committee have spent a considerable amount of effort developing community revitalization strategies. Six of these strategies have been included in the Phase 1 Projects list to be implemented in the next six to 10 years:

- Neighborhood Wrap Around Centers
- Recreation: New Northeast Park & Expanded Trago Park
- Trails: New Downtown/University Trail Loop
- Closer to Home
- New and Rehab Housing Opportunities
- East Downtown: new supermarket, retailing, housing and employment centers.

## 1. Neighborhood Wrap-Around Centers: A Key Neighborhood Component

What is a 'wrap-around center'? Some people have compared a wrap-around center to a neighborhood community center, a school, a cultural center, a health care facility, a recreation facility, child care center, job training center, a one-stop social service center. Any and all the above can be true.

A wrap-around center is designed for the particular neighborhood needs and is typically physically housed in an existing building with several complementary program activities

"wrapped around" a primary core use, such as a school or community center. Wrap-around centers create efficiencies by having several activities and agencies located and working together to provide coordinated community services at a single location. By co-locating many complementary services and programs, an existing building can be utilized from early in the morning until late at night, seven days a week, twelve months out of the year, thus providing a more convenient location to the users, while saving operational and building costs.

The Amended Draft Single Package shows five proposed wrap-around centers:

- Elliott Elementary School
- North 27th Street/Holdrege Community Center (former furniture store area)
- Clyde T. Malone Community Center
- Indian/Armory Center
- Historic Whittier Junior High School

The five wrap-around centers are strategically located in neighborhoods that community based agencies already serve and are also on hiker/biker trails to encourage walking and bicycle access. Wrap-around services could include job training, literacy programs, childcare, computer literacy programs, tutoring, library services, year-round meal provision, expanded recreation opportunities, health care, parent support groups, police substations, social service offices, adult care, senior centers and other community events.

After the community prioritized the wrap-around center concept in the Antelope Valley Study, the City of Lincoln and Lincoln Public Schools commissioned a community study of the wrap-around concept in the spring of 1998 and established a five-phase framework for developing wrap-around centers. Community groups are actively developing wrap-around center proposals for Elliott School, N. 27th Street & Holdrege, and the Malone Center.

## 2. Recreation: New Northeast Park & Expanded Trago Park

Based upon several criteria, Lincoln's central neighborhoods are under served when it comes to recreational opportunities. In response, the Amended Draft Single Package would add a new 33-acre Northeast Park to serve the residents of the Clinton, University Place, Hartley and other area neighborhoods. The proposed location is south of the Burlington Northern Santa Fe railroad tracks and north of Leighton Avenue, between North 28th and 33rd Streets. The John Dietrich bike-way runs along the south and east edges of the proposed park, and would connect to a new trail along Dead Mans Run north to the Salt Creek and Superior Street trails. The Amended Draft Single Package roadway configuration in this area would provide park access on the north side by extending Huntington Avenue westward from 33rd Street.

The park proposal includes several programmed recreation activities, including multiple softball and soccer fields, a picnic pavilion, restrooms, a playground, sand volleyball courts, and multi-use sports courts that would accommodate tennis or basketball.

The construction of the North-South

Roadway as a Phase 1 Project would displace three UNL softball fields near 19th & Vine Streets. The Northeast Park could provide replacement softball fields for these lost UNL fields. The City Parks and Recreation Department and UNL have already outlined a collaborating effort to cost share the operation and maintenance of this new park site.

Trago Park already is a fine eight-acre park providing recreational opportunities to area residents. Recently, the City has added public restrooms and other new park amenities at Trago Park in coordination with the Antelope Valley Study.

Under the Amended Draft Single Package, Trago Park would be connected to the new downtown/University loop trail network and the park expanded south to "O" Street, adding approximately eight new acres. Not only would the expanded Trago Park provide an attractive corridor for the storm-water conveyance, parallel trail and new recreational opportunities, but the expanded park would also benefit the abutting neighborhood and encourage redevelopment opportunities.

## 3. Trails: New Downtown/University Trail Loop

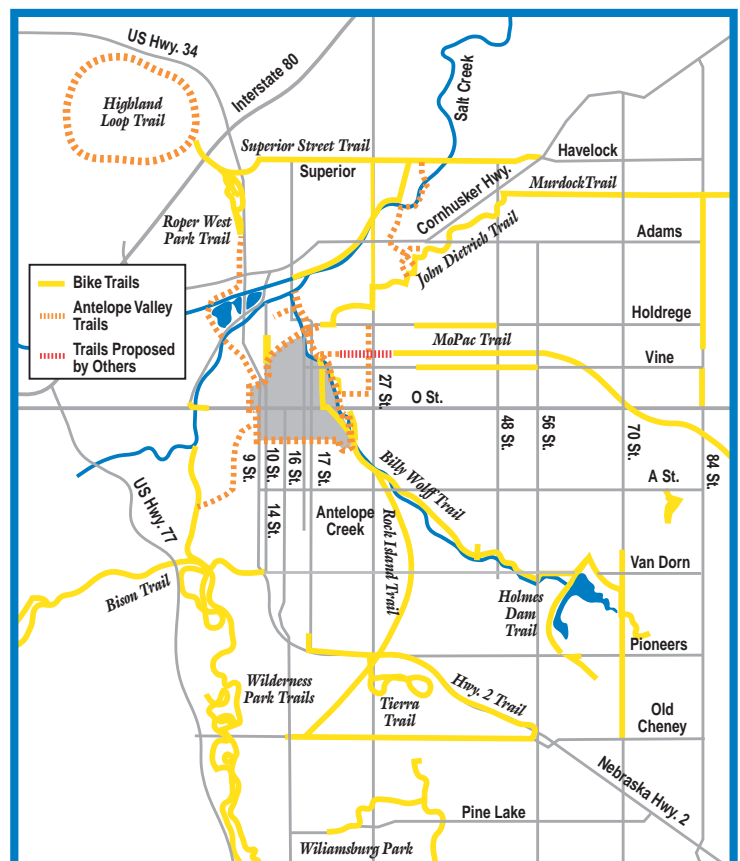
Over the last 12 years, Lincoln has been busy developing a trail network that is now nationally acclaimed. The recreational and commuter trail network connects many of Lincoln's neighborhoods, schools and parks. More new local and regional trail miles are added yearly. Most people would agree the

trail network has definitely added to Lincoln's quality of life. Despite this success, many of the busiest trails head toward the Downtown/University area but often stop many blocks short of the final destination, causing safety concerns when bicyclists have to compete with motor vehicles on narrow and busy streets or compete with pedestrians on four-foot wide city sidewalks.

A new trail loop would be constructed around the edges of Downtown and University areas as part of the Phase 1 Projects. The new Downtown/University loop trail would act as a "hub" connecting the "spokes" of four of Lincoln's key existing trails: Rock Island/Billy Wolff, John Dietrich, MoPac and Salt Creek. These connections would require short extensions of the existing trails to link them to the new hub trail. The extensions and cost estimate are included in the Amended Draft Single Package.

The eastern side of the new loop trail would be formed by the new off street trail that will be incorporated into the expansion of Trago Park and the new landscaped Antelope Creek waterway. The loop would then travel around the University on its northern edge and proceed west and south through the Haymarket area. Next, the loop trail would turn east at "G" Street, using the wide right-of-way. The trail would complete its loop near Lincoln High School where it would connect with the new waterway trail and the existing Rock Island/Billy Wolff trails.

In addition to providing a hub connection for the existing Rock Island, John Dietrich, MoPac and Salt Creek trails, the new





# Other Community Revitalization Opportunities

loop trail would be able to provide better connections to other proposed trail expansions. A new trail is going to be constructed next year through the new baseball and softball complex and over the Burlington Northern Santa Fe tracks into the Haymarket area. This new pedestrian way will provide a link to the new loop trail and to the Oak Lake area and eventually extending up through the I-180 park and into the Highland/Fallbrook/Superior Street trails.

Fund raising efforts are underway to extend the MoPac (Husker Link) to the University area, which would add a major connection between the loop trail and East Lincoln. South Salt Creek neighborhood residents are discussing a new trail connection through their neighborhood, which again could link to the new loop trail. A new Bison Trail connection to Pioneer Park is in the final stages, which could provide a connection between the new loop trail and Southwest Lincoln.

The Amended Draft Single Package also proposes an on-street loop trail providing needed neighborhood access to Malone and Clinton neighborhoods and a better-defined neighborhood boundary between residential and commercial land uses. The new trail route would start at the Downtown/University loop trail and travel east along "Q" Street and then turn north along N. 26th Street. This route would then connect to both the MoPac/Husker Link and the John Dietrich Bikeway.

## 4.

### Closer to Home and Housing Strategies

As part of the Antelope Valley process, the three Partners sponsored a series of neighborhood workshops to encourage the eleven Antelope Valley neighborhoods to define neighborhood vitality strategies for the collective core as well as each individual neighborhood. Often, these defined strategies are neither big-ticket items nor very glamorous, but do have an immediate impact to neighborhood safety, aesthetics and property values. These basic items can be accomplished in close proximity to peoples homes.

Therefore, they are often called "closer to home" strategies and include: Alley paving or re-rocking; sidewalk repairs; tree trimming, planting and removal; street repairs; park improvements/expansion; clean up trash and weeds; street and alley light improvements; fence and screening programs; street calming and abatement of cut-through traffic; dilapidated housing; affordable housing, high density issues; porch building program; neighborhood based retail; trails; lack of convenient public transportation; and vacant buildings and lots.

Meanwhile, the City of Lincoln has not waited for the completion of the Antelope Valley Study and has been working with priority neighborhoods in implementing several new closer to home initiatives in addition to the City's traditional housing and community development programs.

As part of the Antelope Valley effort, Congressman Doug Bereuter assisted the City in securing a \$750,000 federal grant. The City then combined portions of the federal grant with available tax increment financing (TIF)

funds to carry out closer to home strategies in the Clinton, Malone and Hawley Historical areas. Last year efforts totaled approximately \$800,000 and included:

- 39 alleys graveled
- 3 streets resurfaced
- 25 blocks of curbs replaced on both sides of the street
- 68 blocks of replaced sidewalks

The Closer to Home Exterior Repair (CHED) housing program was also developed and committed \$400,000 of funds including monies from the Bereuter assisted federal grant and the State of Nebraska Affordable Housing Trust Fund. These funds were made available to Clinton, Hawley, Hartley, Malone and North Bottoms neighborhoods and resulting activities include:

- 7 homes have received extensive repairs
- 10 homes are under construction
- 25 homes are scheduled to receive repairs
- 25 additional applications are being reviewed.

The Clean Neighborhoods Program is another closer to home strategy. The City has purchased tools to assist neighborhoods in self-help clean up projects. The Malone, Hawley, Hartley, Clinton and North Bottoms neighborhood associations can check out these tools.

In addition, the City of Lincoln Urban Development Department has assisted or is assisting Malone, Clinton, North Bottoms, Everett, South Salt Creek, Woods Park and Near South and Downtown Neighborhood in developing focus area plans that particularly define specific sets of housing and community revitalization strategies for the participating neighborhood. In turn, these plans will be funded with federal and city funds along with self help voluntary efforts by the neighborhoods.

## 5.

### New and Rehab Housing Opportunities

New or expanded housing construction is another Antelope Valley strategy. Public participants indicate the need to provide new and rehabilitated housing opportunities in the area for low, middle and high income families and individuals. As part of the neighborhood workshops, the goal to maintain and increase the number of single-family residences received a high priority. In the flood plain, many owners have not been able to make housing improvements. Building The New Antelope Creek Channel will narrow the flood plain, thus opening these areas to housing renewal. Neighborhoods Inc. has also been busy strengthening neighborhoods by funding loans to many homeowners in the Antelope Valley Study area. Presently, Neighborhoods, Inc. is undertaking a strategic planning process to see how it might be able to provide expanded housing and related services to the core neighborhoods.

At the outer edges of these neighborhoods, the Antelope Valley Study proposes higher density housing, such as condominiums, loft apartments and attractive row houses. One possible expanded housing location is along 18th Street, north of "K" Street (the Near South neighborhood) to the UNL City Campus. Additional areas for consideration of higher residential densities exist east of

the new North-South Roadway and on both sides of the attractive new waterway.

The proposed budget for the Phase I Projects also includes funds to help the City Urban Development Department relocate viable homes that would be acquired as part of the waterway and roadway right of way acquisition process. Study participants believe some of these older homes can successfully be relocated as in-fill housing on vacant lots and provide complementary style housing.

## 6.

### East Downtown: New water walk, supermarket, retailing, housing and employment centers

Most citizens view the eastern edge of downtown to be 17th Street. However, many blocks of downtown businesses and downtown B-4 zoned land are located east of 17th Street. To many citizens this east downtown "auto land" area is unattractive, has inadequate traffic circulation, and does not strengthen the rest of downtown, Haymarket area and UNL. The Antelope Valley Phase I Projects attempt to address these concerns.

The combination and location of the proposed waterway and North-South Roadway would be the first major wave of improvements. The new aesthetic waterway would remove the threat of the designated 100-year flood from generally 19th to 25th Streets. The construction of a



Design charrette of proposed entrance feature at O Street.

landscaped boulevard with wide medians along the 19th Street corridor would increase the traffic flow and provide business visibility. The removal of the designated flood plain on the UNL campus would allow the University to implement its master plan, which shows seven future research buildings located close to the Beadle Center. These new university activities will border the east downtown area on the north and will further reinforce the opportunity for redevelopment and prosperity between traditional downtown and the new waterway. In addition, this enhanced research activity will attract venture capital to the city, benefiting Lincoln and the State.

If the east downtown area is given the proper attention and public improvement investments, it is anticipated the private sector would respond positively, like it did in the Haymarket area, by improving this east downtown area. After reviewing the Antelope Valley Study, early response by some of Lincoln's major building developers has been positive. The common message from these developers has been that the elected officials will have to commit to the new waterway and roadway so there is a level of confidence that the flooding

threat will be removed and traffic circulation improved before large private sector dollars will reinvest in the area.

An important concern is not to compete with the current Downtown, but to add to the range of Downtown opportunities. The proposed roadway and stormwater improvements are not the end, but the first steps to encourage additional private reinvestments. The Amended Draft Single Package envisions many new private sector redevelopment projects in this area in response to the Antelope Valley public investments.

### Supermarket

Central Lincoln area residents have expressed a need for a new downtown supermarket. Market analysis and interviews with major supermarket chains confirm a supermarket would be successful in the east downtown area, near the proposed North-South Roadway and "O" Street. Contributing factors include the large projected traffic counts on the proposed North-South Roadway and "O" Street, the large UNL, downtown and core area populations living and working in the area, and the potential increased residential population attracted to the new housing

opportunities. Depending upon the size and parking needs for a new supermarket, up to two blocks would have to be assembled.

### Market Place "P" Street

One of this community's major architectural assets is the former Rock Island train station, now owned and utilized by Union Bank. The old train station, a building listed in the National Register of Historic Places, is located between the proposed roadway and the waterway. The Antelope Valley plan envisions this structure along with new retail, office and housing development in the immediate vicinity helping to anchor a mixed use development in the east downtown area, while encouraging Market Place ("P" Street) entertainment activities to grow towards the new waterway. Eventually, Market Place could be anchored by the historic Burlington train station (Lincoln Station) in the Haymarket and the historic Union Bank/Rock Island train station near the new waterway, all located immediately south of and paralleling the UNL campus.

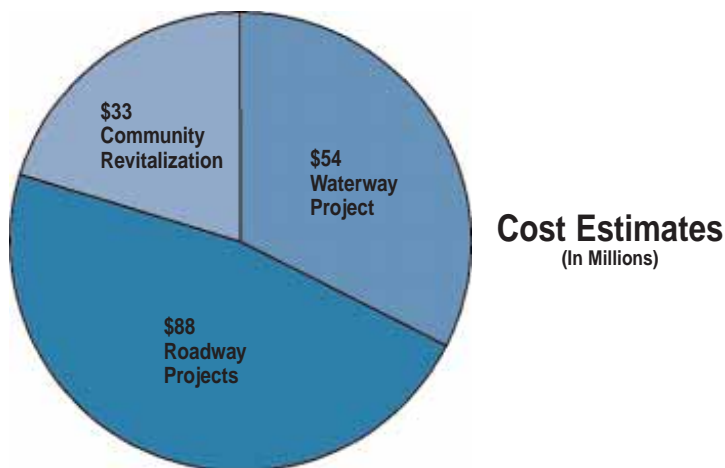
## Project Cost Estimates

The proposed Phase 1 Projects would take approximately six to 10-years to construct at a cost of approximately \$175 million in today's dollars. Subject to completion of detail plans, preliminary cost estimates include:

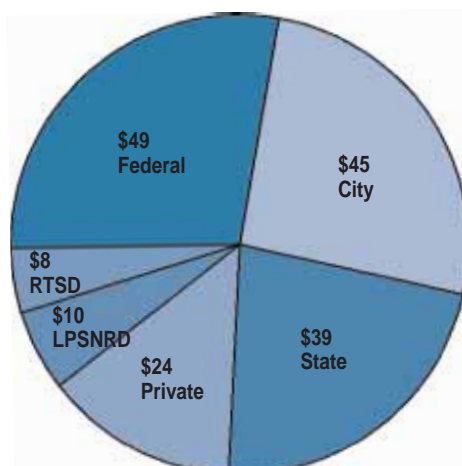
Waterway, Bridges, Trails & Landscape	\$54 million
Railroad Grade Separation Road Improvements	\$52 million
North-South & East-West Roadways with Trail & Landscape	\$36 million
East Downtown Redevelopment	\$13 million
Neighborhood Development & Closer-to-Home Strategies	\$9 million
Northeast Park & Trago Park	\$7 million
Community Wrap-Around Community Centers	\$3 million
Balance of Bike Trail Loop	\$1 million

**TOTAL = \$175 Million**

[1999 Dollars] over 6 to 10 years



**Funding (In Millions)**



## Proposed Project Funding

Funding for the \$175 million Phase 1 Projects could come from a variety of federal, state, and local funding sources over a six to 10-year period:

Federal government, including Water Resources Funds, Road Demonstration Funds, Urban Development Grants, and Park Grants	\$49 million
State of Nebraska, including State Park Grant, Housing Funds, and a \$25 million requested appropriation from the Nebraska Legislature for State benefits	\$28 million
City of Lincoln's share of the State of Nebraska gas tax monies, often referred to as State Road Funds	\$18 million
City of Lincoln's share of the federal gas tax monies, often referred to as Federal TEA-21 Road Funds	\$7 million
City of Lincoln, including Highway Allocation Funds, Urban Development Funds, and Park Development Funds	\$10 million
City bonded tax increment, generated by additional real estate taxes paid by the private sector based upon new development and rehabilitation efforts	\$10 million
State and University land transfers	\$11 million
Burlington Northern Santa Fe Railway	\$12 million
Private investors, corporations and foundations	\$12 million
Lower Platte South Natural Resources District (LPSNRD)	\$10 million
Railroad Transportation Safety District	\$8 million

**TOTAL = \$175 Million**

[1999 Dollars] over 6 to 10 years

The proposed funding sources, spread over six to ten years, seem to be reasonable amounts to allocate to Antelope Valley—yet allowing other priority Partner projects to also be funded and built. Each year the Partners will need to formally approve their budgets, thus the funding numbers are deemed “proposed.”

No significant increases in City property taxes are planned because of these capital improvements. Assuming the Antelope Valley Study receives “project” approval, the City’s current Capital Improvement Budget and Plan for Fiscal Year 1999-2005 (“CIP”) already includes the “place holder” transportation resources as stated above, while also continuing to fund the other City priority road projects.

The LPSNRD could apply to the Nebraska Natural Resources Commission for funds as well as use LPSNRD general funds.

As part of the funding, the State of Nebraska and the University of Nebraska-Lincoln will transfer property and right of way valued at approximately \$11 million. The University will not divert nor use existing state general funds, or tuition revenue for the proposed Phase 1 Projects.

Under an Interlocal Agreement, the three Partners will define responsibilities for the ongoing operating, maintenance, repairs, and replacement costs.



## Antelope Valley Milestones to Date

**August 1995–Spring 1996**

**June 1996**

**September 1996**

**Fall 1996**

**November 1996**

**March 1997–July 1997**

**July 1997–November 1997**

**November 1997**

**December 1997**

**August 28, 1998**

**September–October 1998**

**November 16, 1998**

**January–September 1999**

**April 1999**

**May 4, 1999**

**June 2000**

**June 2000**

**July 24, 25, 26 & 27, 2000**

**July 29, 2000**

**August 1st and 2nd, 2000**

**August 1st and 2nd, 2000**

**Fall 2000**

**Winter 2000**

**Fall 2000 to Summer 2001**

**Estimated start: Summer 2001**

Process Committee develops Public Involvement Process and Work Plan for the Antelope Valley Study.

Formation of Advisory Committee.

Town Hall 1 identifies Eight Purposes & Needs of the Study and develops over 100 solutions.

Study Team analyzes and screens over 100 potential options.

Super Commons (Mayor, City Council, County Board and Planning Commission with UNL and LPSNRD representatives) approves the early portions of the Antelope Valley Study.

Advisory Committee reviews over 100 community revitalization, transportation and stormwater solutions and creates four alternative packages of the best solutions.

A draft of the best Single Package Plan is developed by the Advisory Committee for public review.

Town Hall 2 reviews the Draft Single Package.

Super Commons recommends the Draft Single Package as part of City-County Comprehensive Plan.

City Council approves the Amended Draft Single Package but asked Three Partners to further study “5 specific Issue Areas.”

After many public meetings, Advisory Committee reaches consensus on “5 Issue Areas.”

City Council approves the “5 Issue Areas” as an amendment to the Comprehensive Plan.

Study Team and Advisory Committee prepare and revise preliminary Functional Design Plans on Phase 1 of the Amended Draft Single Package.

Partners send Draft Environmental Impact Statement (DEIS) to federal government.

City Council approves the Amended Draft Single Package as an amendment to the Comprehensive Plan but asked that the “P” Street proposal be revisited.

Federal government deems DEIS complete and ready for public review and comments.

U.S. Army Corps of Engineers deems the Draft Feasibility Report and Draft Environmental Assessment complete and ready for public review and comments.

## Upcoming Milestones

The optimistic timetable for the first set of governmental approvals would be the Fall of 2000, with possible construction beginning in the Fall of 2001 and taking six to 10 years to complete. Next steps possibly (optimal time line) include:

Open Houses to review and ask questions on Amended Draft Single Package, Draft Feasibility Report and Draft Environmental Assessment, Draft Environmental Impact Statement, and the proposed Phase 1 Projects.

Bus Tours of the proposed Phase 1 Projects. Several translators available for non-English speaking area residents.

Town Hall 3 and public hearings on the Draft Environmental Impact Statement, Assessment of Effects Report and the Draft Feasibility Report and Draft Environmental Assessment.

Joint Antelope Valley Authority (JAVA) sponsors public review and hearings on the Amended Draft Single Package and the proposed Phase 1 Projects.

The City gives first round approval to the Amended Draft Single Package as Comprehensive Plan Amendment and Phase 1 Projects funding.

Other federal, state and local agencies and entities review and grant other necessary governmental approvals.

JAVA carries out the next stage of functional design, budgeting and pre-construction activities.

Three partners approve Implementation Phase of the Interlocal Agreement, permitting JAVA to carry out implementation and construction of the Phase 1 Projects.

Construction begins and takes five to nine years to complete the Phase 1 Projects.

# Some Will Be Asked To Move For A Greater Public Good

While much effort has gone into locating projects of the Amended Draft Single Project to avoid the need to acquire private property, a relatively small number will need to be purchased for a greater public good. In order to reduce flood damages and the designated 100-year flood plain and provide a better and safer road network, approximately 46 homes and 44 businesses need to be acquired to provide the necessary public right-of-way for the open channel and roadways in the Amended Draft Single Package Phase 1 Projects. Many resident and business people have already

expressed a willingness to be acquired and relocated, while many others would prefer to stay.

"The toughest part for elected officials and city staff is acquiring people's homes and businesses that the owners and tenants spent many, many hard years to create and want to stay put," said Roger Figard, the Antelope Valley Project Manager and City Engineer. "Since the beginning of our democracy, government has had the power to acquire an individual's property for a public purpose provided that government compensates the

individual with a fair market value price. In addition to paying fair market value for an individual's property, state and federal laws require local government to pay these citizens for their relocation and moving expenses."

"Nevertheless, the disruption to people's lives and livelihood is great and we need to appreciate and do everything we can under the law to assist them," added Figard. "We ask them to sacrifice a great deal for the good of the bigger community. In this case, their sacrifices will allow over 800 residences and 200 business to be free of the 100-year

designated flood threat and provide a better road network that will reduce congestion, increase travel time and help abate inner-city blight for many, many citizens. It is an unfortunate consequence, but it is part of the democratic process and elected officials are given the responsibility for making those decisions on behalf of the whole community."

The Antelope Valley Plan includes relocating viable homes that would be acquired as part of the water and roadway onto vacant and fill in lots.



## Kansas City Project Provides an Example

When Lincoln backers of Antelope Valley need an example to illustrate their vision, they often use a flood control and redevelopment project 200 miles away. Kansas City has spent \$86 million to reduce flooding along Brush Creek, a drainage basin in the middle of the city that links such well-to-do areas as Country Club Plaza with poorer, inner-city neighborhoods. The roots of the flood-control project and related redevelopments date to one of Kansas City's worst tragedies. During heavy rains in 1977, Brush Creek filled with water and jumped its banks. The ensuing floods killed 25 people and caused about \$100 million in damage, much of it in Country Club Plaza, the expensive shopping area south of downtown. Afterward, the city and U.S. Army Corps of Engineers developed a plan to prevent similar tragedies.

In 1991, after years of discussion and voter approval of a \$50 million bond issue, the city began to deepen and widen the creek. Bridges were raised because the structures can act like a dam during heavy rains. More than a mile of Brush Creek has been changed to

reduce the chance of flooding, but another \$36 million in improvements for another mile are needed. Officials have yet to find the money.

But the improvements made so far are credited with doing what they were supposed to do: Saving lives and property.

Kansas City's last deadly flood occurred in October, 1998. Four to 6 inches of rain fell in a few hours. The downpour, made worse by suburban development and the city's rolling hills, caused floods that killed 11 people. In the improved areas of Brush Creek, the water swelled dramatically but stayed within its banks. Unlike 21 years ago, Country Club Plaza was spared.

Downstream areas that have yet to be improved were not so fortunate. A low bridge scheduled for replacement caused water to back up and flooded dozens of nearby apartments. Water spilled over a low bridge at another location and took five people to their deaths. The deaths and destruction prompted anger from some people who questioned whether the creek's improvements were made

first in the Country Club Plaza at the expense of poorer residents downstream. City officials replied that the Country Club area was improved first because that is where most of the damage occurred in 1977. And, they noted, the improvements have yet to be finished. "If we hadn't done these improvements, the October storm would have caused more damage than in 1977," Dennis McMann, a parks official, said during a recent tour of the area. "Even though it was less rain, it came in a shorter time. The improvements did the job here, but unfortunately they haven't been done farther downstream."

The water in Brush Creek is controlled by a series of dams operated by the city's Parks Department. On a recent visit, water along much of the creek had been drained to allow new construction as well as repairs from the October storm. Next to the Country Club Plaza, however, the creek remained an attractive waterway 3 to 8 feet deep. Water circulated by pumps flowed over the concrete liner that drops in stair-step fashion at one point to create a waterfall effect. Downstream, a foun-

tain sprays water 40 feet into the air. Sidewalks, extensive landscaping and bridges with pedestrian walkways add to the picturesque scene.

Private and nonprofit developers have joined the city in investing in the creek corridor. Multi-million dollar buildings are going up or are planned for the area, including the new headquarters for the Kaufmann Foundation, the Stowers Institute for Medical Research and an H & R Block service center. "None of this would be happening without the creek being improved because the infrastructure wouldn't be present," said Frank Ellis, chairman of Model Cities Health Corp., a nonprofit corporation that has built a \$21 million health clinic, drug treatment center and day care center near the creek. An affiliate housing development has started and there are plans for a shopping center and offices. In the past, the area had flooded every six to eight years.

Reprinted with permission from Lincoln Journal Star/Ed Russo.





## Joint Antelope Valley Authority

It would be difficult for the three separate governing bodies to independently address all the issues and detailed decisions on a six to 10-year set of interrelated projects in a timely fashion. To help provide an efficient and coordinating governing structure, the three Partners designed the Joint Antelope Valley Authority (JAVA) in March of this year.

Created by a written Interlocal Agreement, JAVA is an administrative governmental entity created to help disseminate Antelope Valley Study information to the public and elected officials, complete final project design, secure project funding from private individuals, corporations, foundations and different levels of government and construct the approved Phase 1 Projects.

A three member administrative board governs JAVA, with each Partner appointing a board member. The administrative board members include Glenn Johnson, General Manager of the Lower Platte South Natural Resources District, Scott Lewis, Interim Vice Chancellor for Business and Finance for the University of Nebraska-Lincoln, and Allan Abbott, City Public Works Director. The acting Project Manager for JAVA is Roger Figard, who is also the City Engineer.

Representatives of the Lincoln-Lancaster County Railroad Transportation Safety District, State of Nebraska Department

of Administrative Services, Nebraska State Board of Agriculture, and Nebraska Military Department are invited to participate at meetings of JAVA as ex-officio nonvoting members. All public accountability and open meeting rules apply to JAVA.

If the necessary governmental approvals are secured this fall, JAVA would begin a first year work plan. These proposed activities include: design and pre-construction activities for the Phase 1 Projects, preparation of the necessary property appraisals, acquisition and relocation assistance programs, voluntary acquisition, and finalizing the funding and financing package with the State of Nebraska and other funding sources. A citizen committee will also be formed to provide input and advice to JAVA and the three Partners.

If the first year activities are successful, the three Partners would approve a supplemental Interlocal Agreement. Subsequent years (five to nine years) activities would include: complete design, funding, property acquisition, relocation assistance programs, construction and implementation of the Phase 1 Projects.

The three Partners believe JAVA offers the best joint decision-making and accountability model to insure successful project review and implementation within financial constraints,

while allowing each Partner to reserve all its authorization, appropriation, bonding and taxing powers.

JAVA has no authority to levy taxes or to bond the credit or revenues of any Partner. Each year, the Administrative Board of JAVA will prepare and distribute to each Partner a recommended funding amount needed from each Partner. In turn, each Partner's governing body retains control over its own annual budget processes based upon legal and fiscal constraints, while remaining responsive to ever changing situations, shifts in public interest, and emergencies.

After the completion of a specific project, JAVA will transfer all improvements and real estate to the appropriate individual Partner for ongoing operation and maintenance.

One of the primary benefits of coordinating and carrying out an interrelated and multi-jurisdictional set of projects over a multi-year time frame is that each of the Antelope Valley Partners contributes a relatively small portion of the overall Phase 1 Project investment of funds, assets and administrative services, and in return creates relatively high public benefits. In order to create the desirable net public benefit, each governmental Partner will provide its share of the funds, assets and administrative services over the Phase 1 time frame based upon an agreed budget.

## Reports Available for Review and Comment:

Antelope Valley Draft Environmental Impact Statement,  
Federal Highway Administration, June, 2000 (DEIS)

Antelope Creek Draft Feasibility Report and Draft Environmental Assessment,  
U.S. Army Corps of Engineers, June, 2000 (Feasibility Report)

Assessment of Effect to NRHP and NRHP-Eligible Sites and Properties in the  
Antelope Valley Study Area, Antelope Valley Study Team,  
June 2000 (Assessment of Effect)

These reports and all other Antelope Valley Study reports are available at City Libraries as well as the Lincoln Planning Department and City Council Clerk's offices at 555 South 10th Street. The DEIS, Draft Feasibility Report and Draft Environmental Assessment and Assessment of Effects Report can be seen at the website [www.ci.lincoln.ne.us/city/pworks/index.htm](http://www.ci.lincoln.ne.us/city/pworks/index.htm)

The Antelope Valley Study has published six newsletters beginning in January, 1996 through March, 1999. There will be continued publications as the process moves forward to keep you up to date. If you would like to receive a newsletter, please contact Antelope Valley Study Team, 1111 Lincoln Mall, Lincoln, NE 68508, phone (402) 474-6311.

## Acknowledgements

Antelope Valley Partners wish to thank the Lincoln-Journal Star for the fine series of articles published January 10-13, 1999. Many ideas and concepts were used to help prepare this publication.

Antelope Valley Partners also would like to thank the many people and organizations for their assistance in preparing the Antelope Valley Study supplement.

For further questions or comments, please contact: Antelope Valley Study Team, 1111 Lincoln Mall, Suite 111, Lincoln, Nebraska 68508, Phone (402) 474-6311,

# Draft Environmental Impact Statement

When a plan or project potentially involves a significant federal action or federal funding, then a federal Environmental Impact Statement may be required. A Draft Environmental Impact Statement for the 15-20 year vision known as the "Amended Draft Single Package" has been prepared by the Antelope Valley Study Team. In turn, the Federal Government published in the Federal Register a Notice on the Availability, June 30,

vehicle access routes would be altered (but maintained).

**Safety and Security:** Four at-grade rail crossings would be removed to improve safety. Some emergency vehicle response routes would change, but access would be maintained and improved. The potential for loss of property and life during a 100-year flood would be virtually eliminated.

**Environmental Justice:** Neither minority nor low-income populations will receive disproportionately high or adverse impacts as a result of a project. The southernmost one-fourth of the study area has the highest percentage of minority and low-income populations. While there are impacts to this area (for example, most residential buildings that would be acquired are in the southernmost study section), the benefit would be that remaining homes and businesses would no longer be within a floodplain. Traffic would not use residential streets as a throughway. New housing and rehabilitation programs are centered in these areas, too.

**Acquisition and Relocation:** With the Amended Draft Single Package, 46 residential buildings containing 48 households, and 64 privately-owned, non-residential buildings containing 44 businesses would be acquired at fair market value. Eleven publicly owned buildings would also be acquired and replaced along with three softball fields and four other UNL recreation fields/courts. Relocation assistance would be provided in accordance with federal and state requirements. Some homes deemed structurally sound and consistent with neighborhood integrity may be relocated to nearby vacant parcels as part of a separate City community revitalization program.

**Economic:** In the short-term, the Amended Draft Single Package would slightly reduce annual property tax revenues. However, the long-term gains in tax revenues as the downtown and neighborhood redevelopment plans are realized would more than offset the short-term losses. The Amended Draft Single Package would also generate construction jobs over a 15-year period. Some jobs may relocate outside the study area through business relocations, but downtown redevelopment and some of the community revitalization measures would create new jobs for area residents.

**Pedestrians and Bicyclists:** There would be positive, long-term impacts on the bicycle and pedestrian environment. Safety would be enhanced as pedestrians and bicyclists are separated from motor vehicle and rail traffic. Connecting the separate trails will encourage broader use of the system.

**Air Quality:** Air quality at over-capacity intersections would be better under the Amended Draft Single Package since cars would idle less at over-capacity intersections.

**Noise:** With the Amended Draft Single Package, 15 study area properties have been identified with a potential exterior noise impact as defined by the Federal Highway Administration. Of these, 12 are residential, two are commercial, and one is recreational. A range of actions to mitigate noise was considered, including constructing noise barriers, or installing acoustical windows. The City may also choose to establish buffer zones through zoning to limit development in areas where traffic noise is incompatible with land uses.

**Vibrations:** No adverse long-term impacts are anticipated since roadway vibrations at the UNL Beadle Center—where sensitive microscopes are in use—are very low and are less than those already caused by the building's mechanical systems.

**Floodplains:** With the Amended Draft

Single Package, the Antelope Creek floodplain would be reduced to a channel, resulting in about 1,100 fewer structures within the floodplain.

**Threatened and Endangered Species:** No threatened and endangered species are located within the study area.

**Water Body Modification:** The Amended Draft Single Package would provide long-term wildlife and aquatic habitat improvements through an increased length of open stream, improved channel cross section, a continuous landscaped greenbelt, and a new pond near Lewis Ball Fields.

**Cultural Resources:** The Amended Draft Single Package alignments and character avoid adverse effect on any protected cultural resource, except the environs of the



Design charette of potential development south of "O" Street.

2000, that the 446 page Antelope Valley Draft Environmental Impact Statement meets federal requirements for completeness and is ready for a minimum 45 day public review and comment period. After the comment period is over and the document is revised accordingly to address substantive comments, the completed Environmental Impact Statement is given to decision makers to utilize in their decision-making process.

An Environmental Impact Statement is a document containing thorough information about a proposed action. The Environmental Impact Statement process helps assure that significant adverse impacts possibly resulting from the Amended Draft Single Package have been avoided where possible and that any remaining adverse impacts will be beneficially mitigated. The reasonable alternatives evaluated in detail in the Draft Environmental Impact Statement includes only the Amended Draft Single Package (Preferred Alternative) and a No-Action Alternative.

## Highlights Of Some Of The Potential Major Environmental Impact Areas

Compared to the No-Action Alternative, some of the potential major environmental impact areas of the Amended Draft Single Package are:

### Affected Communities:

**Neighborhood Cohesion:** With the Amended Draft Single Package, existing neighborhood boundaries would be reinforced with clear land use and transition boundaries. Overall quality of life for residents would be improved as cut-through traffic is removed from neighborhood streets.

**Community Resources:** Trail connections and recreational opportunities would be enhanced, service access to downtown for residents would be improved, and some

## Summary of Environmental Impacts

Potential Impacts	Alternative Considered	
	Amended Draft Single Package	No-Action Alternative
Affected Communities	Impacts are overwhelmingly positive since linear improvements follow neighborhood boundaries.	There would be no impacts, other than those associated with non-Antelope Valley projects.
Environmental Justice	Most benefits and impacts occur in the southern most one-fourth of the study area, the area of Lincoln with the highest percentage of minority and low-income residents. Extensive public involvement effort has included representatives from the southern most study section.	There would be no impacts, other than those associated with non-Antelope Valley projects. Benefits of the Amended Draft Single Package would not be realized.
Land Use	The Amended Draft Single Package would introduce facilities that are consistent with land uses in the study area.	The No-Action Alternative would maintain mismatched land uses downtown, and is less consistent with the officially adopted plans of the study Partners.
Acquisition and Relocation	121 buildings would be acquired, including 46 residential buildings (48 households) and 75 commercial buildings (44 businesses), includes 11 public buildings.	There would be no impacts, other than those associated with non-Antelope Valley projects.
Economic Impacts	Long-term gains in tax revenues would result as the downtown redevelopment plans are realized, offsetting any short-term losses. The Amended Draft Single Package would generate construction jobs for 15 years. Some jobs would be moved outside the study area, but downtown redevelopment and revitalization measures would create new jobs for area residents.	Tax revenues would remain the same or decline, while far less construction-related employment and little long-term job creation would occur.
Pedestrians and Bicyclists	New trails and trail connections would be provided at key links.	Trails would remain unlinked through downtown, with no new north-south scenic trail along Antelope Creek.
Air Quality	No air quality impacts are anticipated.	No impacts are anticipated
Noise	Impacts would occur at 15 properties, with mitigation considered for each.	No impacts are anticipated
Vibrations	No long-term impacts are anticipated, and short-term impacts would be mitigated.	No impacts are anticipated
Lighting	No impacts with light side-shields at Beadle Center.	No lighting impacts are anticipated
Wetlands	An estimated 0.36 hectare (0.90 acre) of wetlands would be affected and potential mitigation sites are under investigation. Permit applications would be prepared during final design, prior to construction.	No impacts would occur, other than those associated with non-Antelope Valley projects.
Floodplains	Antelope Creek floodplain width would be reduced. Reduced risk of flooding would remove disincentives to redevelopment, reduce flood insurance costs for many, improve public safety, and enable revitalization of urban core.	No change to Antelope Creek floodplain would occur.
Threatened/Endanger Species	No impacts would occur.	No impacts would occur.
Farmland	No impacts would occur.	No impacts would occur.
Water Quality	No impacts are anticipated. Potential aquatic wildlife benefits with well water supplements to Antelope Creek during low flow periods.	No impacts are anticipated.
Water Body Modifications	Long-term wildlife and aquatic habitat improvements would occur through improved channel morphology, a continuous landscaped greenbelt, and possible supplementation of streamflow and a new pond.	No impacts are anticipated.
Cultural Resources	Three potentially National Register of Historic Places-eligible archeological sites and six historic buildings would be adversely effected.	No impacts are anticipated.
Environmental Risk Sites	Hazardous substance and petroleum release sites would be avoided to the extent possible. Where encountered, contaminated soil will be removed and contaminated water treated in accordance with state law.	No impacts are anticipated.
Visual Impacts	The few important views in the study area, such as that of the State Capitol, would not be negatively impacted. The intersection of the North-South and East-West Roadways would be elevated and would be visible in the surrounding vicinity—thus, changing the existing visual character.	No impacts would occur.
Energy	The one-time expenditure of energy during construction would eventually be compensated somewhat by long-term energy savings.	No impacts would occur.
Physiography, Topography, Geology and Soils.	No impacts would occur.	No impacts would occur.
Wild and Scenic Rivers	No impacts would occur.	No impacts would occur.
Coastal Zones & Management	No impacts would occur.	No impacts would occur.
Permits	All necessary permits will be applied for prior to construction.	No impacts would occur.
Construction	Short-term impacts to be mitigated to the extent practical.	No impacts would occur.



*DEIS (continued from page 18)*

State Arsenal listed in the National Register of Historic Places and five houses, potentially eligible for listing in the National Register of Historic Places. Mitigation to protect the State Arsenal may include improved displaying area around the building. The historic houses may be relocated under the City's community revitalization program. However, if it is determined that any of them cannot be moved, such buildings would be documented prior to being removed.

**Environmental Risk Sites:** Based on a search of federal and state databases, nine potential hazardous substance release sites, 51 known petroleum release sites, and 59 potential petroleum release sites are located adjacent to components of the Amended Draft Single Package. Mitigation measures include avoiding the sites, removing the contaminated media or building materials, or treating contamination on-site.

**Visual:** The intersection of the North-South and East-West Roadways, however, would be elevated approximately 9 meters (30 feet) above grade, and would be visible in the surrounding vicinity—thus, changing the

sion, water quality degradation, noise, and vibration. Appropriate mitigation would be provided for all identified impacts. Short-term impacts would be managed and mitigated through an agreement between JAVA, the Partners, and the construction contractor.

**Relationship Between Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity:** More consistent land use patterns in central Lincoln would evolve, socioeconomic systems would benefit from private investment opportunities, through traffic would be removed from residential neighborhoods, safety would be improved at railroad crossings, and access to goods and services in Lincoln's core would be improved. Impacts to ecological systems would be minimal.

**Secondary Impacts:** A number of the community revitalization components are secondary actions since they are dependent on containing the Antelope Creek floodplain and/or providing better access to and from Lincoln's core. These components include the downtown supermarket, downtown mixed-use development, stormwater conveyance-related parks, new downtown

natives around these areas. In addition, a greater percentage of intersections would be over capacity with the No-Action Alternative as compared to the Amended Draft Single Package (62 vs. 30 percent).

**Access:** The angled railroad tracks in the study area create problems for traffic operations by blocking some streets from connecting over the tracks. More and longer trains block traffic on streets that do cross the tracks for several hours every day. Future traffic (over 77,000 vehicles per day) will continue to be subject to delays at the Study's four railroad crossings at 14th, 17th, 33rd, and Adams Streets. The Amended Draft Single Package eliminates the grade crossings and introduces new structures to accommodate grade-separated roadway traffic at the railroad tracks. These improvements will reduce traveler delays and safety.

**Section 4(f):** The Amended Draft Single Package potentially encroaches upon five Section 4(f) protected resources and upon three archeological sites. Therefore, there would be a Section 4(f) use of the resources. Meetings have been held with responsible officials to discuss potential Section 4(f) impacts and appropriate

# A Final Thought

"On behalf of the three

Partners, we hope you have a

clearer vision of the Antelope

Valley picture," said Mayor Don

Wesely. "After four years of study,

it is now time for the community

to review that picture,

ask questions and formulate its

collective preference. Then we

can turn the study into a set of

projects and start implementing

the first set of proposed storm-

water, transportation and com-

munity revitalization projects."

"The vision is exciting," the

Mayor added. "The price tag is

high, but it is affordable when

funded over a period of years,

with other levels of government

and the private sector contribu-

ting to the project costs. This

community can grow in a quality

manner and still keep taxes

affordable. We need to balance a

healthy, safe and prosperous city

core with a vibrant and expan-

ding community edge. In the

three Partner's opinion, it is now

time to move forward and imple-

ment this visionary project."



Holmes Lake provides suburban flood control, a park and recreation opportunities.

existing visual character. The important views in the study area, such as that of the State Capitol, would not be negatively impacted.

**Permits:** Among those permits and compliances necessary for the Amended Draft Single Package are: US Army Corps of Engineers Section 404 of the Clean Water Act, Section 401 Water Quality Certification (NDEQ), City of Lincoln/Lancaster County Floodplain Development Permit, and National Pollutant Discharge Elimination System Permit. Agreements with the BNSF Railway and area utilities are also necessary.

**Construction:** Short-term impacts associated with the Amended Draft Single Package include traffic, air quality, soil ero-

housing, and trails. The impacts of these actions are overwhelmingly positive. Other actions that are planned (sometimes by others) to occur include redevelopment at State Fair Park, construction of a new health clinic, and the relocation of displaced housing to vacant, in-fill sites.

**Traffic Impacts:** The growth forecast in Lincoln is expected to result in a 44 percent increase in overall traffic as the region approaches the "Build Out Scenario," which provides the basis for the No-Action Alternative and the Amended Draft Single Package. Under the No-Action Alternative, more traffic to and from downtown uses streets that would go through neighborhoods and UNL because there are few alter-

mitigation. They agree there are no feasible and prudent alternatives to avoid the remaining impacts, and every effort has been made to minimize harm, and mitigate impacts.

**Other:** The other potential major environmental impact areas that are included in the Draft Environmental Impact Statement are: demographics; land use; lighting; wetlands; water quality; energy; wild and scenic rivers; coastal barriers; coastal zones; relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity; any irreversible and irretrievable commitments of resources which would be involved in the proposed action; and cumulative impacts. See the summary box to page 18.